**HP**Photosmart
945
Digital Camera
with
HP Instant
Share



User's Manual



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# Chapter 1: Getting Started

Congratulations on your purchase of this digital camera! This camera has many features to enhance your picture-taking experience, including HP Instant Share<sup>TM</sup>, direct printing capability, manual and automatic controls, on-camera Help, and an optional camera dock.

With HP Instant Share, you can easily select images in your camera to be automatically sent to your favorite destinations (such as e-mail addresses and online albums) the next time you connect the camera to your computer. Your friends and family can easily receive and view your pictures in e-mail without being burdened by large file attachments. And with the direct printing capability, you can easily select images in your camera to be automatically printed the next time you connect the camera to your computer or directly to any HP Photosmart printer or other select HP printers without ever connecting to your computer.

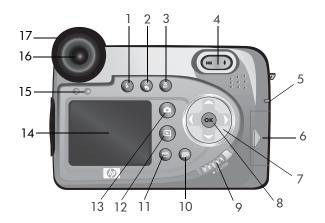
To further enhance your experience, you may purchase an HP Photosmart 8881 camera dock. The camera dock allows you to easily download images to a computer, send images to a printer or television, and recharge the camera batteries. It also provides a convenient home for your camera.

NOTE A dock insert is included in your camera box. Please do not discard it, because it enables your camera to use the optional HP 8881 camera dock. See page 129 for instructions on how to use the camera dock.



#### **Camera Parts**

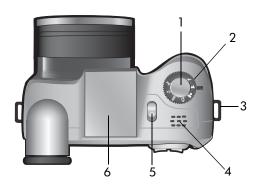
**NOTE** Refer to the pages in parentheses after the part names for more information about those parts.



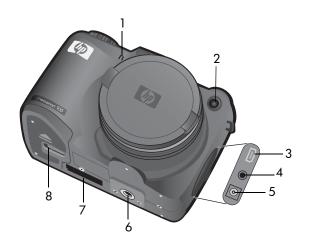
| # | Name                              | Description   |
|---|-----------------------------------|---|
| 1 | <b>5 Flash</b> button (page 32)   | Allows you to select the different flash settings (this button only works when the flash assembly is up). |
| 2 | Timer/Burst button (pages 34, 35) | Allows you to select between NORMAL, SELF-TIMER, SELF-TIMER - 2 SHOTS, and BURST mode.                    |
| 3 | Focus button (page 36)            | Allows you to select between NORMAL, MACRO, INFINITY, and MANUAL focus settings.                          |

| #  | Name  | Description   |
|----|---|---|
| 4  | Zoom lever with  ★★ Zoom Out  and ★ Zoom In (page 30) | Zooms out the lens to the wide angle position, and in to the telephoto position.  |
| 5  | Power/Memory<br>light (page 17)                       | <ul> <li>Solid green—camera is on.</li> <li>Solid amber—camera is writing to the memory card.</li> <li>Blinking green—camera is off and is charging the batteries.</li> <li>Blinking red—batteries depleted and camera is shutting down.</li> <li>Off—camera is off.</li> </ul> |
| 6  | Memory card<br>door (page 17)                         | Allows you access to insert or remove the memory card.  |
| 7  | © Controller with ▲ ▼ and  ◆ buttons                  | Allows you to move through menus and images on the Image Display.   |
| 8  | OK button<br>(pages 40, 61)                           | Allows you to display the Capture and Playback menus and to select menu options on the Image Display.   |
| 9  | ➤ ON/OFF<br>switch (page 17)                          | Turns the camera power on and off.  |
| 10 | HP Instant Share button (page 69)                     | Turns the <b>Share</b> menu on and off on the Image Display.  |
| 11 | Print button (page 60)                                | Allows you to select images for printing.   |
| 12 | ▶ Playback<br>button (page 57)                        | Turns <b>Playback</b> on and off on the Image<br>Display.   |

| #  | Name   | Description  |
|----|--|--|
| 13 | button (page 23)                             | Turns Live View on and off on the Image Display.   |
| 14 | lmage Display<br>(page 23)                   | Allows you to frame pictures and video clips using Live View and review them afterward in Playback, and to view all the menus. |
| 15 | Eye Start sensor<br>(pages 23, 84)           | Turns on the microdisplay in the viewfinder when it detects that you are looking into the viewfinder.                          |
| 16 | Viewfinder with<br>microdisplay<br>(page 23) | Allows you to frame the subject of your picture or video clip.   |
| 17 | Diopter control<br>(page 19)                 | Adjusts the focus in the microdisplay. (It does NOT affect the focus of the image or video clip that you capture).             |



| # | Name                                    | Description   |
|---|---|---|
| 1 | Shutter button<br>(pages 27, 28,<br>29) | Takes a picture and records audio, or starts and stops recording a video clip                             |
| 2 | Mode selector<br>(pages 29, 38)         | Allows you to select between video mode<br>and a number of different exposure<br>modes for still pictures |
| 3 | Neck strap<br>mount (page 16)           | Allows you to attach a neck strap (a mount is on each side of the camera)                                 |
| 4 | Speaker                                 | Plays camera sounds and audio clips   |
| 5 | • Pop-up flash<br>release<br>(page 32)  | Pops up the flash assembly. The flash will be set to FLASH OFF ③ until you pop up the flash               |
| 6 | Pop-up flash<br>assembly<br>(page 32)   | Provides additional light to improve picture-taking   |



| # | Name   | Description  |
|---|--|--|
| 1 | Microphone<br>(page 28)                                | Records audio clips  |
| 2 | Self-Timer/<br>Focus Assist<br>light<br>(pages 34, 85) | Blinking red—Self-Timer is activated     Solid red—on for short periods in low light conditions to improve auto focus  |
| 3 | USB connector<br>(pages 77, 79)                        | Allows you to connect a USB cable from the camera to a USB-enabled computer or printer   |
| 4 | TV connector<br>(page 81)                              | Allows you to connect an optional Audio/<br>Video cable from the camera to a television  |
| 5 | Power adapter<br>connector<br>(page 126)               | Allows you to connect an optional<br>HP AC power adapter to the camera to either<br>operate the camera without batteries, or<br>recharge the batteries in the camera |
| 6 | Tripod mount   | Allows you to mount the camera to a tripod   |

| # | Name                                   | Description  |
|---|--|--|
| 7 | Camera dock<br>connector<br>(page 126) | Allows you to connect the camera to the optional HP 8881 camera dock |
| 8 | Battery door<br>(page 16)              | Allows access to insert and remove the batteries                     |

## Setup

#### **Attaching the Lens Cap Tether**

- 1 With the front of the camera facing you, insert the small loop of the lens cap tether through the neck strap mount on the right side of the camera.
- 2 Insert the long loop of the tether through the small loop and pull to tighten the knot.
- 3 Insert the long loop of the tether through the lens cap tether mount.
- 4 Pull the long loop over the sides of the lens cap and then under the lens cap, as shown. Pull to tighten the knot.

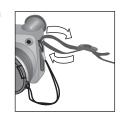




#### Attaching the Neck Strap

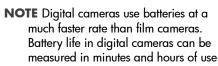
Insert one end of the neck strap through a neck strap mount. Then thread the neck strap through the plastic tab to secure it.

Repeat to attach the other end of the neck strap to the other neck strap mount.



#### **Installing the Batteries**

- 1 With the front of the camera facing you, open the battery door on the bottom of the camera by sliding the latch to the "unlock" (☐) position and pulling the door toward you.
- 2 Insert the batteries as indicated inside the door.
- 3 Close the battery door by pushing the door toward the back of the camera and sliding the latch to the "lock" ( △ ) position.



rather than the years more typical of film cameras. Battery life may vary dramatically from one user to another, depending on what modes the camera is being used in most frequently. Battery life will also vary dramatically depending upon the type of batteries installed in the camera. For hints on optimizing battery performance, see Managing Batteries on page 121.





NOTE If you have rechargeable batteries, you can use the optional HP Photosmart 8881 camera dock or the optional HP AC power adapter to recharge the batteries while they are in the camera. For more information about these optional accessories, see Purchasing Camera Accessories on page 126.

#### **Installing the Memory Card**

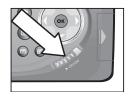
- 1 With the camera turned off and the back of the camera facing you, open the memory card door by sliding the door to the right.
- 2 Insert the memory card, making sure that it clicks into place.
- 3 Close the memory card door.

To remove the memory card, turn the camera off and open the memory card door, then push the memory card in and it will spring outward from the slot.

#### **Turning on Power**

Turn the camera on by sliding the NOV/OFF switch to the right and then releasing it.

The lens extends, the Image Display turns on, and the Power/Memory light turns on solid green.



NOTE If the Power/Memory light is blinking red, the batteries are very low, and the camera will shut down soon.

Replace or recharge the batteries, or use the optional HP AC adapter to power the camera.

#### **Understanding the Status Screen**

When you turn on the camera, the HP logo screen and then the status screen appear briefly on the Image Display.

The main part of the status screen shows the number of pictures remaining, battery level, and the current settings for Flash, Resolution, and Compression. Any non-default Capture menu settings are shown as icons across the top of the status



screen (default settings for **Capture** menu items do not have icons).

The status screen also appears for a few seconds any time you press the Flash button, Timer/Burst button, Focus button, or open/close the pop-up flash assembly.

#### **Choosing the Language**

The first time you turn the camera on, the following screen appears and prompts you to choose a language.

- 1 Scroll to the language that you want by using the \_\_\_\_ buttons on the Controller (3).
- 2 Press the OK button to select the highlighted language.



NOTE If you need to go back and change the language later, you can do this in the Setup menu. See Chapter 6: Using the Setup Menu on page 83.

#### **Setting the Date and Time**

The camera has a clock that records the date and time at which you take each picture. This information does not appear in the image itself, but is recorded in the image properties, which you can see when viewing the image in the Image Info screen (page 67), in the Playback menu screen (page 61), or on your computer. The first time you turn the camera on, the following screen appears after you choose the language.

- Adjust the value of the highlighted selection using the buttons.
- 2 Press the **1** buttons to move to the other selections.
- 3 Repeat steps 1 and 2 until the correct date, time, and date/time format are set.



**NOTE** mm=month, dd=day, and yyyy=year

4 Press the OK button when the proper values are entered. The Image Display then turns off.

NOTE If you need to go back and change this setting later, you can do this in the Setup menu. See Chapter 6: Using the Setup Menu on page 83.

#### **Adjusting the Diopter Control**

The rubber eye piece on the viewfinder is a diopter control that allows you to adjust the focus in the microdisplay. Put your eye up to the viewfinder, and then turn the diopter control until the information overlays (such as the number of pictures remaining, Compression setting, and Resolution setting) are in focus on the microdisplay. The diopter control has NO effect on the actual picture you take or video clip you record.

#### **Installing the Software**

NOTE A copy of this User's Manual (in several different languages) is located on the HP Photo & Imaging software CD. Look in the \docs\Readme file on the CD to see where the manual is located.

The camera software allows you to unload images from the camera, view them, print them, and e-mail them. It also allows you to configure the **Share** menu on the camera.

#### Windows

- NOTE For the HP Instant Share component of the HP Photo & Imaging software to function properly on your Windows computer, you must have installed at least Internet Explorer 5.01 on Windows 2000 or XP, or Internet Explorer 5.01 Service Pack 2 on Windows 98, 98 SE, or Me.
- Close all programs and temporarily disable any virus protection software running on your computer.
- 2 Insert the HP Photo & Imaging software CD into the CD drive of your computer. The installation window should automatically appear.
- **NOTE** If the installation window does not appear, click **Start**, click **Run**, type X:\Setup.exe, where X is the letter of your CD drive, then click OK.
- **3** Follow the on-screen instructions to install the software.

Your Windows CD may also include bonus software from other manufacturers. To install any bonus software:

- 1 Click Start, click Run, type X:\Bonus\Setup.exe, where X is the letter of your CD drive, then click OK.
- 2 Follow the on-screen instructions to install the software.

#### Macintosh

- 1 Close all programs and temporarily disable any virus protection software running on your computer.
- 2 Insert the HP Photo & Imaging software CD into the CD drive of your computer.
- 3 Double-click the CD icon on the computer desktop.
- 4 Double-click the installer icon, and then follow the on-screen instructions to install the software.

NOTE Before you can unload images from the camera to a Macintosh computer, you must first change the USB Configuration setting to Disk Drive in the Setup menu on the camera. See Chapter 6: Using the Setup Menu on page 83, and then see USB Configuration on page 88.

Your Macintosh CD may also include bonus software from other manufacturers. To install any bonus software:

- 1 Double-click the Bonus folder icon.
- 2 Double-click the installer icon for the bonus software.
- 3 Follow the on-screen instructions to install the software.

# Chapter 2: Taking Pictures and Recording Video Clips

### **Using the Displays**

Your camera has two displays - the Microdisplay and the Image Display. Whichever display is currently on will be called the "active display" throughout this manual:

| Microdisplay (viewfinder)  | Image Display   |
|--|---|
| Allows you to frame pictures and video clips using Live View, and to view the Capture and Setup menus.   | Allows you to frame pictures<br>and video clips using Live View,<br>review images and video clips in<br>Playback, and to view all the |
| Activate Live View by looking through the viewfinder. The Eye Start sensor below the viewfinder detects your eye and automatically turns on the microdisplay. Use the diopter control to adjust the focus in the microdisplay (see page 19). | menus.  Activate Live View by pressing the Live View button.  |

**NOTE** Using the Image Display consumes a lot of battery power. To preserve batteries, use the microdisplay instead.

**NOTE** If the microdisplay does not turn on automatically when you look through the viewfinder, you may need to change the Eye Start setting in the Setup menu. See Eye Start on page 84.

The following table describes the information that is displayed in the Live View screen of the active display when the camera settings are at their default values. If you change other camera settings, icons for those settings will also be displayed.



| # | Icon             | Description  |  |
|---|------------------|--|--|
| 1 | 12<br>or<br>1:18 | Remaining pictures count or remaining video clip recording time (actual numbers depend on how much space remains on the memory card).  |  |
| 2 | **               | Compression setting (default is ★★, or Better).  |  |
| 3 | 5 MP             | Resolution setting (default is 5 MP).  |  |
| 4 | -ww              | A shaking hand icon will appear when you press the Shutter button half-way down while taking a still picture if the camera detects that the picture is likely to be blurry due to the long exposure that will be required. Therefore, you may want to use the flash (see Using the Pop-up Flash on page 32) or a tripod. |  |
| 5 | 1/2<br>F12.4     | The shutter speed and F-number. This appears when you press the <b>Shutter</b> button half-way down while taking a still picture.  |  |
| 6 | or               | <ul> <li>Battery level when using batteries (see Battery Gauge on page 122).</li> <li>AC power when using the optional HP AC adapter or Camera Dock.</li> </ul>  |  |

| # | Icon     | Description  |  |
|---|----------|--|--|
| 7 | 3        | • FLASH OFF when the pop-up flash assembly is down.  |  |
|   | or<br>A4 | <ul> <li>AUTO FLASH (default flash setting when the pop-up<br/>flash assembly is up).</li> </ul> |  |
| 8 |          | Focus brackets (see the next section below).   |  |

#### **Using the Focus Brackets**

The two brackets in the middle of the active display screen show the focus region for the picture you are taking or the video clip you are recording. When you press the **Shutter** button halfway down, the camera uses this region to measure and then lock the focus.

NOTE In low light conditions, the red focus assist light on the front of the camera (see page 14) may turn on briefly to help the camera focus. If you are in a situation where you do not want the focus assist light to turn on, you can turn it off in the Setup menu (see Focus Assist Light on page 85).

The focus brackets turn green when the region in the brackets is in focus and the camera can lock the focus, but turn red when the camera is unable to focus.

• If the focus brackets turn red, release the Shutter button, reframe the subject for your picture or video clip, and then press the Shutter button halfway down again. If the focus brackets continue to turn red after several tries, there may not be enough contrast in the focus region. Try using a technique called Focus Lock to focus on an object about the same distance away but in a higher-contrast region, then point the camera at the object you were originally trying to photograph (see Using Focus Lock on page 26).

- If the focus brackets turn red and the MACRO icon blinks on the active display, one of the following is true:
  - The camera is set to the NORMAL focus range but detects the focus is closer than the normal range.
  - The camera is set to the MACRO (close-up) focus range but detects the focus is farther away than the macro range. In this case, the camera will not take a picture if it cannot find focus.

**NOTE** No focus brackets appear if the camera is set to MANUAL FOCUS (see **Using the Focus Settings** on page 36).

#### **Using Focus Lock**

Focus Lock allows you to focus on a subject that is not in the center of the picture, or to capture action shots more quickly by pre-focusing in the area where the action will occur. You can also use Focus Lock to help achieve focus in low light or low contrast situations.

- 1 Frame the subject for your picture within the focus brackets.
- 2 Press the Shutter button halfway down to lock the focus and exposure.
- 3 Continue to hold the Shutter button halfway down while you re-frame or adjust your subject for proper positioning.
- 4 Press the Shutter button all the way down to take the picture.

### **Taking Still Pictures**

You can take a picture almost any time the camera is on, regardless of what is being shown on the active display.

- Rotate the Mode selector to AUTO or another of the exposure modes (see Setting the Exposure Mode on page 38).
- 2 Pop up the flash assembly (see page 32).
- **3** Frame the subject for your picture in the active display.



- 4 Hold the camera steady (especially if using zoom) and press the Shutter button halfway down. The camera measures and then locks the focus and exposure (the focus brackets will turn green if the camera is able to focus, see page 25). If an icon of a shaking hand (4) appears in the active display, you may want to either use the pop-up flash or set the camera on a tripod or stable surface, otherwise the picture might be blurry.
- 5 Press the Shutter button all the way down to take the picture. You will hear a shutter click when the camera takes the picture.

After a picture is taken, the image appears for several seconds in the active display. This is called **Instant Review**. You can delete the image during **Instant Review** by pressing the OK button. If you prefer, you can turn off **Instant Review** in the **Setup** menu (see **Instant Review** on page 86).

To review the pictures you have taken, press the Playback Dutton (see Using Playback on page 57).

NOTE If you release the Shutter button only halfway after taking a picture, the focus and exposure measurements from the previous picture are retained. You can then press the Shutter button all the way down again and take another picture with the same focus and exposure as the previous picture. You can continue to do this to capture a sequence of pictures using the same focus and exposure. This is helpful when rapidly taking pictures and for capturing images for panoramic stitching.

#### **Recording Audio with Still Pictures**

There are two ways to attach an audio clip to a still picture:

- Record the audio while you are taking the picture (explained in this section).
- Add an audio annotation to the picture later (or rerecord the audio that was captured when the picture was taken). For details on how to do this, see Play/Record Audio on page 64.

NOTE The method described in this section is not available in Self-Timer or Burst modes.

- 1 Press the Shutter button all the way down to take the picture.
- 2 Continue to hold the Shutter button down to record the audio clip. A microphone icon (♠) and audio counter appear on the active display during recording.
- 3 To stop recording, release the Shutter button, otherwise the audio will continue recording for up to 60 seconds or until the memory card fills up, whichever comes first.

To play back, delete, or record new audio clips, use the Record Audio section in the Playback menu (see Using the Playback Menu on page 61).

## **Recording Video Clips**

- 1 Rotate the Mode selector to Video The mode.
- 2 Frame the subject for your video in the active display.
- 3 Press the Shutter button halfway down to measure and lock focus (exposure is continually measured and adjusted during recording).



- 4 To start recording, press the Shutter button all the way down and release it. A counter and REC appear in the active display.
- 5 To stop recording, press the Shutter button all the way down again. Otherwise, the camera will automatically stop recording when the maximum video clip length of approximately 1 minute is reached, or the memory card is full, whichever comes first (note that maximum clip length can vary depending on scene content).

After recording has stopped, the first frame of the video clip and PROCESSING... appear on the active display. While it is processing, you can delete the video clip by pressing the OK button. You can use Playback to review the video clips you have taken. See Play on page 64.

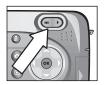
**NOTE** If you use the zoom, motor noise from optical zooming will be recorded in the audio portion of a video clip. Thus, for best audio quality, do not use the zoom while recording video.

### **Using Zoom**

the more you zoom in on the subject of your picture, the more that even small movements of the camera are magnified (this is called "camera shake"). So, especially at full telephoto zoom (8x), you really need to hold the camera steady in order to take a picture that is not blurry. If an icon of a shaking hand (4h) appears in the active display, you may want to set the camera on a tripod or stable surface, otherwise the picture will likely be blurry.

#### **Optical Zoom**

Optical zoom works like the zoom on a traditional film camera, with physical lens elements moving inside the camera to make the subject of your picture appear closer.



Press Zoom Out ★★ and Zoom In ♠ on the Zoom lever to move the lens between wide angle (1x) and telephoto (8x) positions.

Whenever the zoom lever is pressed, a zoom meter appears at the bottom of the active display. A white bar in the middle



of the zoom meter separates optical and digital zoom. This zoom meter is not shown when video clips are being recorded.

NOTE If the camera is set to MACRO focus, you can only zoom to 3.5x. The zoom meter will consequently look different in Macro mode, with a wider white bar in the middle of the meter.

#### **Digital Zoom**

Unlike optical zoom, digital zoom uses no moving lens parts. The camera essentially crops the image to give an appearance of the subject of the picture being an additional 1.2x to 7x larger.

**NOTE** You cannot use digital zoom while recording video clips.

- 1 Press the Zoom In ♠ control to optically zoom in to the maximum level, then release the button.
- 2 Press Zoom In ♠ again and hold it until you reach the desired size in the active display. A yellow frame surrounds the area of the image that will be captured. The Resolution number on the left side of the screen also becomes smaller



- as you digitally zoom. For example, 2.9 appears in place of 5 MP, indicating that the image is being reduced to a size of 2.9 Megapixels.
- **3** When the yellow frame is at the desired size, press the **Shutter** button to take the picture.

To turn digital zoom off and return to optical zoom, press **Zoom**Out \*\*\* until digital zooming stops. Release the zoom control, and then press it again.

NOTE Digital zoom reduces the resolution of an image, so your picture will tend to be more pixilated than the same image taken with optical zoom. If you just intend to e-mail an image or post it to a website, this loss of resolution will not be noticeable, but in situations where the highest quality counts (such as printing), limit the use of digital zoom.

## Using the Pop-up Flash

NOTE The flash will not work while recording video clips.

The flash is turned off and will not fire until you manually pop it up by sliding the pop-up flash & release on top of the camera. When the flash is popped-up, it begins to charge and is automatically set to the AUTO FLASH setting.



To change the flash setting, press the Flash \$ button on the back of the camera until the desired setting appears on the active display. The following table describes the different flash settings.



NOTE If you change the flash setting, the camera will remain in that setting until you change it or turn off the camera.

| lcon | Setting                           | Description  |
|------|-----------------------------------|--|
| A4   | AUTO FLASH                        | The camera measures light and uses the flash if necessary.   |
| A4   | AUTO WITH<br>RED-EYE<br>REDUCTION | The camera measures light and uses the flash with red-eye reduction if necessary (see Note below for further description of red-eye reduction).                                    |
| 4    | FLASH ON                          | The camera always flashes. If the light is<br>behind your subject, you can use this<br>setting to increase the light on the front of<br>your subject. This is called "fill-flash." |

| lcon       | Setting                                  | Description  |
|------------|--|--|
| <b>\$</b>  | FLASH ON<br>WITH<br>RED-EYE<br>REDUCTION | The camera will always fire the flash with red-eye reduction, no matter the lighting conditions (see Note below for further description of red-eye reduction).   |
| 04         | NIGHT                                    | The camera fires the flash if necessary to illuminate objects in the foreground. It then continues to expose as if the flash had not fired to gather the background.   |
| <b>0</b> 4 | NIGHT WITH<br>RED-EYE<br>REDUCTION       | The camera fires the flash if necessary (using red-eye reduction) to illuminate objects in the foreground. It then continues to expose as if the flash had not fired to gather the background (see Note below for further description of red-eye reduction). |

To turn the flash off, press the pop-up flash assembly down until it snaps shut. When the flash is off, the FLASH OFF & icon appears at the top of the Live View screen.

NOTE The red-eye phenomenon is caused by light from the flash reflecting off the subjects' eyes, which sometimes makes a human's or animal's eyes appear red in the captured image. When you use a flash setting with Red-eye Reduction, the camera flashes twice, minimizing the red-eye in the captured images of humans or animals. It will take longer to take a picture using Red-eye Reduction, because the shutter is delayed for the additional flash. In turn, make sure your subjects wait for the second flash.

## **Using Self-Timer Mode**

- Secure the camera to a tripod or set it on a stable surface.
- 2 Press the Timer/Burst ( ) button until SELF-TIMER or SELF-TIMER—2 SHOTS
   appears in the active display.
- 3 Frame the subject in the active display.
- **4** The next steps depend on what you are capturing:



## Still picture

- Press the Shutter button halfway down for Focus Lock (camera measures, then locks the focus and exposure).
   The camera will hold these settings until it takes the picture.
- 2 Press the Shutter button all the way down. A 10-second countdown appears on the active display and the Self-Timer light on the front of the camera blinks for 10 seconds before the camera takes the picture. If you set SELF-TIMER—2 SHOTS, the Self-Timer light blinks for a few more seconds until the second picture is taken. NOTE If you immediately press the Shutter button all the way down without using Focus Lock, the camera will lock focus and exposure just before the end of the 10-second countdown. This is useful when one or more subjects will be entering the picture during the 10-second countdown period.

You cannot record audio when using the Self-Timer, but you can add an audio clip later (see page 64).

#### Video clip

- 1 Rotate the Mode selector to Video 🗁 mode.
- 2 To start recording, press the Shutter button and then release it. A 10-second countdown appears in the active display, and then the video will start recording.
- 3 To stop recording the video clip, press the Shutter button again. or let it time out by itself (see page 29)

## **Using Burst Mode**

Burst allows you to take multiple still pictures in a row as quickly as the camera possibly can. This feature is not available for video clips.

- 1 Press the Timer/Burst <sup>a</sup> button until BURST □ appears in the active display.
- 2 Frame the subject and press the Shutter button all the way down and hold it.
- 3 The camera takes pictures as quickly as possible and as many as the memory buffer can hold (typically between 4 and 6) or until the Shutter button is released (whichever happens first).

The Image Display remains off during the burst capture, and then after the burst pictures have been taken, each image appears one at a time on the Image Display. If you have Instant Review turned off (page 86), the Image Display will stay off for a few seconds while the camera processes the images, then it returns to Live View.

NOTE You can use the flash with Burst mode, but it will slow down the rate at which the pictures are taken. For the fastest burst rate, turn off the flash, but be aware of camera shake if the scene is dark (you might want to use a tripod to stabilize the camera).

## **Using the Focus Settings**

The Focus \* button lets you toggle between four focus settings on the camera.

The following table describes each of the focus range settings on the camera.



| lcon     | Setting         | Description   |
|----------|-----------------|---|
| None     | NORMAL          | Use when taking pictures of subjects greater than 0.8 m (31.5 in) away. Auto focus is limited to a range of 0.8 m (31.5 in) to infinity. This is the default focus setting.   |
| **       | MACRO           | Use when taking close-up pictures of subjects less than 0.8 m (31.5 in) away. In this mode, the camera will not take a picture if it cannot find focus (the focus brackets turn red in the active display and an error message appears). Auto focus has a distance range of 0.1 to 0.8 m (3.9 to 31.5 in). Zoom position is limited to a range of wide to 3.5x. |
| $\infty$ | INFINITY        | Use when taking pictures of distant objects and landscapes. Focus range is limited to a small region near infinity.   |
| MF       | MANUAL<br>FOCUS | Allows you to step manually through the full focus range. Use the buttons to adjust the focus. You can determine the focus by observing the image in the active display and by a meter that appears on the right side of the active display. For more information, see Hints on Using Manual Focus on page 37.  |

#### **Focus Search Priority**

When the camera is set to NORMAL or MACRO focus, it begins searching for focus from the last focus position. However, you can use the \_\_\_\_\_ buttons to change this behavior. This feature is useful when there are multiple objects at different distances in the focus region.

- Holding the button while pressing the Shutter halfway down causes the camera to begin searching for focus from the farthest position (infinity in NORMAL mode and 0.8 m in MACRO mode), thus making the camera more likely to focus on an object in the background.
- Holding the button while pressing the Shutter halfway down causes the camera to begin searching for focus from the nearest position (0.8 m in NORMAL mode and 0.1 m in MACRO mode), thus making the camera more likely to focus on an object in the foreground.

#### **Hints on Using Manual Focus**

- Make sure to adjust the diopter control properly before using manual focus with the microdisplay (see page 19).
- To find the best focus position, adjust the focus so that the image looks like it is in focus on the active display. From this position, press the button until the image begins to blur, then press the button until the image begins to blur. Then set the focus position halfway between the locations where the image began to blur.
- To lock focus for a set of pictures, let the camera find the best focus using the NORMAL setting, then switch to MANUAL FOCUS. The focus will then be locked at that distance until you adjust it manually or switch to another focus setting.

#### **Setting the Exposure Mode**

The Mode selector lets you choose between six exposure modes for still pictures. (A seventh setting, Video □ mode, is explained on page 29.)

The exposure mode setting determines how the camera selects settings such as aperture (F-number) and shutter speed for the given scene brightness.



To change the exposure mode, turn the Mode selector to the setting you want. The following table describes each of the exposure mode settings on the camera.

| lcon     | Setting   | Description  |
|----------|-----------|--|
| AUTO     | AUTO      | The camera automatically selects an aperture and shutter speed.  |
| K        | ACTION    | The camera biases toward faster shutter speeds and higher ISO speeds to stop action. When the camera is set to this option, the ISO Speed menu option is grayed-out in the Capture menu.                   |
|          |           | This mode also has a "2-second release priority" feature (see page 39).  |
| <b>A</b> | LANDSCAPE | The camera biases toward smaller apertures and lower ISO speeds for better depth of focus and quality. When the camera is set to this option, the ISO Speed menu option is grayed-out in the Capture menu. |
| *        | PORTRAIT  | The camera biases toward wider apertures to blur the background.   |
| 다        | VIDEO     | Camera records video clips (see Recording Video Clips on page 29)  |

| lcon | Setting              | Description  |
|------|----------------------|--|
| Tv   | SHUTTER<br>PRIORITY  | Lets you select the shutter speed in Live View using the $\P$ buttons, while the camera selects the appropriate aperture setting. This allows you to create special effects using the shutter speed (such as blurring the moving water in a stream). |
| Av   | APERTURE<br>PRIORITY | Lets you select the aperture setting (F-number) in Live View using the buttons, while the camera selects the appropriate shutter speed. This allows you to control the depth of field (for example to blur the background).                          |

#### 2-second release priority

When the exposure mode is set to ACTION, you can take multiple pictures in rapid succession without having to wait for the camera to measure focus and exposure for each picture. Release and then re-press the Shutter button all the way down within 2 seconds after taking a picture, and the camera takes the next picture using the same focus and exposure measurements as the previous picture.

#### **Noise Reduction for Long Exposures**

At longer shutter speeds the camera will automatically take a second exposure with the shutter closed in order to measure and reduce the noise (grainy look) in the image. In these cases, the exposure will seem to take twice as long as expected. For example, in a 1-second exposure, the active display will stay dark for 2 seconds until the noise reduction frame is exposed. This means that at longer shutter speeds, you may not be able to take quite as many shots back-to-back.

#### **Using the Capture Menu**

The Capture menu allows you to adjust various camera settings that affect the qualities of the images and video clips you capture with your camera, such as their exposure, color, and resolution.

1 To display the Capture menu, press the Live View button, and then press OK. If the Image Display is already off, you can just simply press OK.



#### Screen two



- 2 Use the buttons to scroll through the Capture menu options.
- 3 Either press the OK button to select a highlighted option and display its sub-menu, or use the ◀ ▶ buttons to change the setting for the highlighted option without going to its sub-menu.
- 4 Within a sub-menu, use the \_\_\_\_ buttons and then the OK button to change the setting for the Capture menu option.
- 5 To exit the Capture menu, highlight the EXIT CAPTURE MENU option and press the OK button.
- **NOTE** Some of the settings in the Capture menu are grayed out when the camera is set to VIDEO mode, meaning that you can not use those settings when recording video clips.

#### Help for the Menu Options

Help... is the last option in each of the Capture sub-menus. The Help... option provides information about that Capture menu option and its settings. For example, if you press OK when Help... is highlighted in the AE Metering sub-menu, the

region of the scene the camera will use to calculate the exposure. The default Center-Weighted setting works well when the subject is in the to scroll. Press OK to exit

The AE (Automatic Exposure) Metering

setting allows you to specify which

AE Metering Help screen is displayed, as shown.

Use the buttons to scroll through the Help screens. To exit the Help and return to the particular Capture sub-menu, press the OK button.

#### **EV** Compensation

In difficult lighting conditions, you can use EV (Exposure Value) Compensation to override the automatic exposure setting that the camera makes.

EV Compensation is useful in scenes that contain many light objects (like a white house in the snow) or many dark objects (like a black cat on a dark background). Scenes containing many light objects or many dark objects could turn out gray without the use of EV Compensation. For a scene with many light objects, increase the EV Compensation to a positive number to produce a brighter result. For a scene with many dark objects, decrease the EV Compensation to darken the scene to be closer to black.

- 1 In the Capture menu (page 40), select EV Compensation.
- 2 In the EV Compensation menu, use the ♠ buttons to change the EV setting in 0.33 steps from -3.0 to +3.0. The new setting is applied to the Live View screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press OK to save the setting and return to the Capture menu.

If the setting is anything other than the default setting of 0 (zero), the number value will appear in the Live View screen next to the 🔀 icon.

The new setting remains in effect until it is changed again or until the camera is turned off (unless EV Compensation is checked in the Remembered Settings menu - see page 90).

#### **White Balance**

Different kinds of lighting conditions cast different colors. For example, sunlight is more blue, while indoor tungsten light is more yellow. Scenes dominated by a single color may require an adjustment of the white balance setting to help the camera reproduce colors more accurately and ensure that whites appear white in the final picture. You can also adjust the white balance to produce creative effects. Using the Sun or Tungsten settings can produce a warmer look to the picture, and the Shade setting can make a sunset picture look more orange.

- 1 In the Capture menu (page 40), select White Balance.
- 2 In the White Balance menu, use the buttons to highlight a setting. The new setting is applied to the Live View screen behind the menu, so you should be able to see the effect the setting will have on the picture.



**3** Press OK to save the setting and return to the Capture menu. The following table helps explain the settings in more detail:

| lcon | Setting | Description  |
|------|---------|--|
| None | Auto    | The camera automatically identifies and corrects for scene illuminance. This is the default setting. |
|      | Sun     | The camera balances color assuming it is outdoors under sunny or bright cloudy conditions.           |
| •    | Shade   | The camera balances color assuming it is outdoors in shade, in dark cloudy conditions, or at dusk.   |

| lcon | Setting     | Description   |
|------|-------------|---|
| •    | Tungsten    | The camera balances color based on incandescent or halogen lighting (typically found in homes).         |
|      | Fluorescent | The camera balances color based on fluorescent lighting.  |
|      | Manual      | The camera calculates a custom White Balance based on your target image (see the following subsection). |

If the setting is anything other than the default setting of Auto, the icon for the setting (in the table above) will appear in the Live View screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless White Balance is checked in the Remembered Settings menu - see page 90).

#### Manual White Balance

If you select the Manual option, the Manual White Balance screen displays. The Live View portion of the screen shows the color tint from the previous Manual White Balance setting that was made.



#### **NOTE** To restore the previous

Manual White Balance setting, simply press the OK button in the Manual White Balance screen without pressing the Shutter button.

To change the Manual White Balance setting:

- Point the camera at a white or gray target (such as a piece of paper), making sure that the region inside the focus brackets encompasses the white or gray target.
- 2 Press the Shutter button (the camera will not take a picture). The camera then calculates a custom White Balance setting based on the region inside the focus brackets. During the calculation, PROCESSING... is displayed on the screen. When the calculation is complete, the color tint in Live View changes to match the new Manual White Balance setting, and WHITE BALANCE SET is displayed.
- 3 If needed, repeat steps 1 and 2 until you get the desired Manual White Balance setting.
- 4 When you are satisfied with the Manual setting you have made, press the OK button to exit the Manual White Balance screen and return to the Capture menu.

#### **AE Metering**

This setting allows you to specify which region of a scene the camera will use to calculate the exposure.

- 1 In the Capture menu (page 40), select AE Metering.
- 2 In the AE Metering menu, use the buttons to highlight α setting.
- 3 Press OK to save the setting and return to the Capture menu.



The following table helps explain the settings in more detail:

| Icon | Setting             | Description  |
|------|---------------------|--|
|      | Average             | The camera uses the entire scene region to measure and calculate exposure. Use this setting when you want everything in the picture to be used equally when calculating exposure.  |
| None | Center-<br>Weighted | The camera uses a large area in the center of the scene region to measure and calculate exposure. This setting is good to use when the subject is in the center of the frame. Exposure will be based more on the subject than on its surroundings. This is the default setting.  |
| •    | Spot                | The camera uses a small area in the center of the scene region to measure and calculate exposure. This can be useful in backlit scenes or when the subject is very dark or light compared to the rest of the scene. When using this setting, put the subject of the picture in the center of the viewfinder, then press the Shutter button halfway down to lock the exposure and focus on the spot in the center, and then recompose the scene as desired. |

If the new setting is anything other than the default setting of Center-Weighted, the icon for the setting (in the table above) will appear in the Live View screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless **AE Metering** is checked in the **Remembered Settings** menu - see page 90).

#### **ISO Speed**

This setting adjusts the sensitivity of the camera to light. When ISO Speed is set to Auto, the camera selects the best ISO speed for the scene.

NOTE If the camera is in ACTION, LANDSCAPE, or VIDEO mode, the ISO Speed will always be set to Auto and the ISO option in the Capture menu will be grayed out.

Lower ISO speeds allow slower shutter speeds, and will capture the best quality pictures with the least amount of grain (or noise). If taking a picture in low light conditions without a flash at ISO 100, you may want to use a tripod. In contrast, higher ISO numbers allow higher shutter speeds, and can be used when taking pictures in dark areas without a flash, or pictures of fast moving objects. Higher ISO speeds produce pictures with more grain or noise and, thus, can be of lower quality.

- In the Capture menu (page 40), select ISO Speed.
- 2 In the ISO Speed menu, use the buttons to highlight a setting.
- 3 Press OK to save the setting and return to the Capture menu.



If the setting is anything other than the default setting of Auto, the number value for the setting will appear in the Live View screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless ISO Speed is checked in the Remembered Settings menu - see page 90).

#### **Digital Flash**

This setting balances the relationship between bright and dark areas in a picture, preserving gentle contrasts but compressing harsh contrasts. Some areas in the picture are lightened, while others are left alone. Here is an example of how **Digital Flash** can enhance an image:

Without Digital Flash



With Digital Flash



Digital Flash is useful in situations like these:

- outdoor scenes with a mixture of sun and shade
- cloudy days when there is a lot of "glare" from the sky
- indoor scenes that use flash photography (to soften or even out the effect of the flash)
- backlit scenes where the subject is too far away for the regular flash to reach

NOTE You can use Digital Flash with or without regular flash, but it is not recommended as a replacement for regular flash. Unlike regular flash, Digital Flash does not affect exposure settings, so brightened areas may appear "noisy" or grainy, and indoor or night images may be blurry if taken without a regular flash or a tripod.

- 1 In the Capture menu (page 40), select Digital Flash.
- 2 In the Digital Flash menu, use the buttons to highlight a setting.
- 3 Press OK to save the setting and return to the Capture menu.



The following table helps explain the settings in more detail:

| lcon | Setting | Description   |
|------|---------|---|
| None | Off     | Camera will process the image as normal. This is the default setting.   |
| D4   | Low     | Useful for most types of scenes containing a mixture of sun and shade, or for images captured with regular flash.   |
| P+4  | High    | Useful for conditions of extreme backlighting, or when you want a dramatic effect. This setting is very strong, and you may not want to print photos much larger than 5" x 7" because the dark areas of the photo will be grainy. |

If the new setting is anything other than the default setting of Off, the icon for the setting (in the table above) will appear in the Live View screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless **Digital Flash** is checked in the **Remembered Settings** menu - see page 90).

#### Color

This setting allows you to control the color in which your images will be captured. For example, when you set Color to Sepia, your images will be captured in brown colors to make them look aged or old-fashioned.

- NOTE Once you have taken a picture using either the Black & White or Sepia setting, the image cannot be adjusted back to Full Color later.
- 1 In the Capture menu (page 40), select Color.
- In the Color menu, use the buttons to highlight a setting. The new setting is applied to the Live View screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press OK to save the setting and return to the Capture menu.

The new setting remains in effect until it is changed again or until the camera is turned off. The Color setting resets to the default (Full Color) when you turn the camera off (unless Color is checked in the Remembered Settings menu - see page 90).

#### Resolution

This setting allows you to set the resolution (number of pixels) at which your images will be captured.

- 1 In the Capture menu (page 40), select Resolution.
- 2 In the Resolution menu, use the buttons to highlight a setting.
- 3 Press OK to save the setting and return to the Capture menu.



The following table helps explain the settings in more detail:

| lcon | Setting     | Description   |
|------|-------------|---|
| 5MP  | 2608 x 1952 | The captured image will be full size (2608 x 1952 pixels). This is the default setting, and is the best choice if you intend to print pictures.   |
| 1MP  | 1296 x 976  | The captured image will be 1/4 size (1296 x 976 pixels). This setting is useful if you just intend to e-mail images or post them to the internet. |

The Pictures remaining count at the bottom of the screen updates when you highlight each setting. See Memory Card Capacity on page 141 for more information about how the Resolution setting affects the number of images that can be saved on your memory card.

The icon for the new setting (in the table above) will appear in the Live View screen. The new setting remains in effect (even if you turn the camera off) until it is changed again.

**NOTE** When you use digital zoom, the resolution changes as you zoom in. See **Digital Zoom** on page 31.

#### Compression

This setting determines how much JPEG compression your images will have.

- 1 In the Capture menu (page 40), select Compression.
- In the Compression menu, use the buttons to highlight a setting.
- 3 Press OK to save the setting and return to the Capture menu.



The following table helps explain the settings in more detail:

| lcon | Setting | Description   |
|------|---------|---|
| ***  | Best    | Produces the highest-quality images, but uses<br>the most memory. This is recommended if you<br>plan to enlarge images, or print images to a<br>size larger than 18 by 24 cm (or 8 by 10 in). |
| **   | Better  | Produces high-quality images and requires less memory than the <b>Best</b> setting. This is the default setting, and is recommended for printing images up to 18 by 24 cm (or 8 by 10 in).    |
| *    | Good    | The most memory-efficient setting, for images that you want to e-mail or post to the Internet.  |

The Pictures remaining count at the bottom of the screen updates when you highlight each setting. See Memory Card Capacity on page 141 for more information about how the Compression setting affects the number of images that can be saved on your memory card.

The icon for the new setting (in the table above) will appear in the Live View screen. The new setting remains in effect (even if you turn the camera off) until it is changed again.

#### **Saturation**

This setting allows you to determine how saturated the colors will be in your pictures.

- 1 In the Capture menu (page 40), select Saturation.
- In the Saturation menu, use the buttons to highlight a setting. The new setting is applied to the Live View screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press OK to save the setting and return to the Capture menu.
The following table helps explain the settings in more detail:

| lcon | Setting | Description   |
|------|---------|---|
| -    | Low     | Mutes colors to give a softer, more "natural" look to the subject.  |
| None | Medium  | Colors will be normally saturated. This is the default setting.   |
| +    | High    | Emphasizes more vivid colors in a scene. Outdoor landscape photography can use high saturation to create skies that are more blue, or sunsets that are more orange. |

If the new setting is anything other than the default setting of **Medium**, the icon for the setting (in the table above) will appear in the **Live View** screen.

The new setting remains in effect (even if you turn the camera off) until it is changed again.

#### **Sharpness**

This setting allows you to set how sharp the edges will be in your pictures.

- 1 In the Capture menu (page 40), select Sharpness.
- In the Sharpness menu, use the buttons to highlight a setting. The new setting is applied to the Live View screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press OK to save the setting and return to the Capture menu.

The following table helps explain the settings in more detail:

| lcon       | Setting | Description  |
|------------|---------|--|
| \$         | Low     | The edges in your images will be softer, with less grain. You can use this setting for taking portrait pictures with softer, more natural edges. |
| None       | Medium  | The edges in your images will have normal sharpness.   |
| <b>(+)</b> | High    | The edges in your images will be more pronounced. This setting may be helpful for outdoor landscapes, but the images will contain more grain.    |

If the new setting is anything other than the default setting of Medium, the icon for the setting (in the table above) will appear in the Live View screen.

The new setting remains in effect (even if you turn the camera off) until it is changed again.

#### **Contrast**

This setting allows you to control how much contrast there will be between the dark and light colors in your captured images, including the amount of detail there will be in the highlights and shadows within the images.

- 1 In the Capture menu (page 40), select Contrast.
- 2 In the Contrast menu, use the buttons to highlight a setting.
- 3 Press OK to save the setting and return to the Capture menu.



The following table helps explain the settings in more detail:

| lcon | Setting | Description  |
|------|---------|--|
|      | Low     | Your images will have less contrast: dark and light colors in the image will be less distinct, and there will be more details in the highlights and shadows. |
| None | Medium  | Your images will have normal contrast. This is the default setting.  |
|      | High    | Your images will have more contrast: dark and light colors in the image will be more distinct, and there will be less details in the highlights and shadows. |

If the new setting is anything other than the default setting of Medium, the icon for the setting (in the table above) will appear in the Live View screen.

The new setting remains in effect (even if you turn the camera off) until it is changed again.

#### Setup

If you press OK when the Setup option is highlighted in the Capture menu, the Setup menu displays. See Chapter 6: Using the Setup Menu on page 83.

## Chapter 3: Reviewing Images

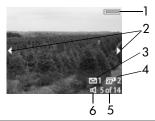
You can use the **Playback** feature to review the images and video clips in your camera. In addition, the **Playback** menu allows you to add, change, or delete audio clips, delete images or video clips, magnify still images, and view all the settings that were used when that image or video clip was captured.

**NOTE** When reviewing images in **Playback**, you can use the **Print** button to select images that you want to have printed automatically the next time you connect the camera. See **Selecting Images** for **Printing** on page 60.

#### **Using Playback**

- 1 Press the Playback button to activate Playback. The most recently taken or reviewed image or video clip appears on the Image Display.
- 2 Use the \( \bar) \) buttons to scroll through your images and video clips. Press and hold the \( \dagger) \) button to scroll faster.
- NOTE You only see the first frame of each video clip, which is indicated by the Video ☐ icon. You can then use the Play option in the Playback menu to play video or audio clips. See Using the Playback Menu on page 61.
- 3 To turn the Image Display off after reviewing your images and video clips, press the Playback ► button again.

During **Playback**, some information about each image or video clip is also displayed. The following table describes the information.



| # | lcon          | Description   |
|---|---------------|---|
| 1 | or            | <ul> <li>Battery level (actual icon shown depends on the state of your camera batteries).</li> <li>AC power when using the optional HP AC power adapter or HP camera dock.</li> </ul> |
| 2 | <b>4 &gt;</b> | Displays for the first few seconds when you enter <b>Playback</b> to indicate that you can scroll through all the images or video clips.  |
| 3 | ☑ 1           | Indicates this image has been selected to be sent to 1 destination using HP Instant Share (see Chapter 4: Using HP Instant Share on page 69).   |
| 4 | <b>2</b> 2    | Indicates this image has been selected for printing 2 copies (see page 60).   |
| 5 | 5 of 14       | Shows the current image number and the total number of images/video clips on the memory card.   |
| 6 | □ or          | Indicates this image has an audio clip.   |
|   | 단             | Indicates this is a video clip.   |

#### **Total Images Summary Screen**

When you press the button while viewing the last image, a screen appears showing the number of images captured, number of images remaining, and counters indicating the total number of images selected for HP Instant Share and printing.



You can also view this screen from anywhere in **Playback** by pressing either of the \_\_\_\_\_ buttons.

#### **Orientation Sensor**

An electro-mechanical device in the camera determines whether the camera is being held horizontally or vertically when the picture is taken. The camera uses the data from this sensor to automatically rotate the image to its proper orientation when saving the file.

#### **Selecting Images for Printing**

The Print Dutton on the back of the camera allows you to set how many copies of a still image you want to have printed automatically the next time you connect the camera to your computer or directly to certain HP printers.

NOTE You can use the Print Dutton any time that you see a still image displayed on the Image Display, such as during Playback, or when you access the main Playback menu or the Share menu.

To select a still image for direct print:

- 1 Press the Print p button.
- 2 Use the buttons to set the number of copies you want to print. The maximum number of copies is 99. The printer of copies that you set appears in the lower right-hand corner of the image.



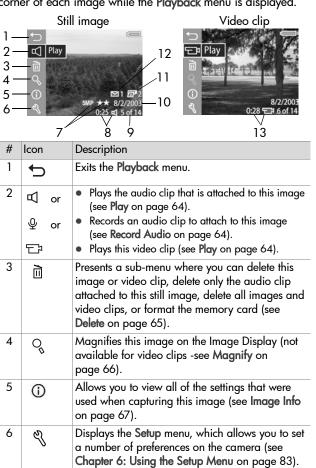
The next time you connect the camera to your computer or printer, the images you have selected will print automatically (see **Printing Images Directly from the Camera** on page 79.)

#### Using the Playback Menu

The **Playback** menu allows you to play or record audio clips, play video clips, delete images, audio clips, or video clips or format the memory card, magnify an image on the Image Display, or view all of the settings that were used when capturing an image. From this menu, you can also access the **Setup** menu to set a number of preferences on the camera.

- 1 To display the Playback menu, press the OK button while you are in Playback. If you are not currently in Playback, press the Playback button first, then press the OK button.
- 2 Use the \( \bar) \) buttons to move to the image or video clip you want to use.
- 3 Use the buttons to highlight the menu options on the left of the Image Display.
- 4 Select a highlighted option by pressing the OK button. Each of the Playback menu options are explained later in this section.
- NOTE While a Playback menu option is highlighted, you can use the ◀ ▶ buttons to scroll to other images and video clips. This is useful for performing the same action on several images or video clips, such as deleting multiple images or video clips.
- 5 To exit the Playback menu and return to viewing images in Playback, highlight the EXIT PLAYBACK MENU option and press the OK button.

The following table summarizes each of the Playback menu options and describes the information in the bottom right corner of each image while the Playback menu is displayed.



| #  | Icon       | Description  |
|----|------------|--|
| 7  | 5 MP<br>★★ | Shows the Resolution (such as 5MP) and Compression (such as the 2 stars for Better) for this image, or blank if it is a video clip (see Resolution on page 51 and Compression on page 52). |
| 8  | 0:25 戊     | Visible if this image has an audio clip attached to it, with the length of the audio clip displayed to the left of the icon.   |
| 9  | 5 of 14    | Shows the current image number and the total number of images/video clips on the memory card.  |
| 10 | date       | Shows the date that this image was captured.   |
| 11 | <b>2</b> 2 | Indicates this image has been selected for printing 2 copies (see Selecting Images for Printing on page 60).   |
| 12 | ☑ 1        | Indicates this image has been selected to be sent to 1 destination using HP Instant Share (see Chapter 4: Using HP Instant Share on page 69).  |
| 13 | 0:28 ☆     | Visible if this is a video clip, with the length of the video clip displayed to the left of the icon.  |

#### Play/Record Audio

In the Playback menu (page 61), the first menu option is either Play or Record Audio depending on the still image or video clip that is currently displayed.

#### Play

This **Playback** menu option appears if one of the following is currently displayed:

- a still image with an audio clip attached to it
- a video clip



Highlight Play, and then press OK to play the audio clip or video clip. You can adjust the audio volume by pressing the buttons while the audio clip or video clip is playing. To stop the clip while it is playing, press the OK button.

#### **Record Audio**

This **Playback** menu option appears if a still image with no audio clip attached is currently displayed. To record an audio clip for the image:

- Highlight Record Audio, and then press OK. Audio recording starts immediately after you select this
  - menu option. A microphone  $\underline{\Psi}$  icon and audio counter are displayed during recording.
- 2 To stop recording, press OK again, otherwise the audio will continue recording for up to 60 seconds or until the memory card fills up, whichever comes first.



#### **Delete**

- In the Playback menu (page 61), highlight Delete and then press OK.
- 2 In the Delete sub-menu, use the buttons to highlight the option you want, and then press OK. These options include:
  - Cancel—Returns to the Playback menu without deleting anything.
  - This Image—Deletes the currently displayed image or video clip.





- Audio Only—Deletes only the audio clip attached to the currently displayed image and keeps the current image.
- All Images—Deletes all of the images and video clips on the memory card.
- Format Card—Deletes all of the images, video clips, and files on the memory card, and then formats the memory card.

**NOTE** Periodic formatting of the memory card will keep it clean of file remnants that may cause the camera to lock up, save images slowly, or corrupt images.

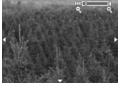
#### Magnify

NOTE If the image that is currently displayed is a video clip, the Magnify menu option is grayed out.

You can use Magnify to see a close-up of the currently displayed image. This option is only for viewing a magnified image on the Image Display; it does not permanently alter the image.

- 1 In the Playback menu (page 61), select Magnify and then press OK. The currently displayed image is automatically magnified on the Image Display, with the center portion of the image visible.
- on the Image Display, with the center portion of the image visible.

  2 You can pan around the magnified image by pressing the
- → and ♠ buttons.
   Press Zoom Out ♠ to decrease magnification and press Zoom In ♠ to increase magnification up to 150x. A meter appears briefly in



್ಯ Magnify

- the top right corner of the Image Display each time you press one of the **Zoom** controls.
- 4 Press the OK button to exit the magnified image and return to the **Playback** menu.

#### **Image Info**

This option allows you to see all of the settings that were used when capturing the currently displayed image.

- 1 In the Playback menu (page 61), select Image Info, and then press OK.
- 2 Use the \(\psi\) buttons to scroll to other images and view their information.
- 3 Then press the OK button to return to the Playback menu.

NOTE The information in the last three rows in the bottom right corner is the same information that appears in the Playback menu (page 61) view of the image.



#### # Description

- 1 Settings for still pictures (this row is blank for video clips):
  - Non-default exposure mode settings (ACTION, LANDSCAPE, PORTRAIT, SHUTTER PRIORITY, or APERTURE PRIORITY).
  - Any non-default Capture menu settings (rest of top row).
- 2 | Settings for still pictures (this row is blank for video clips):
  - Shutter speed.
  - F-number (aperture).
  - EV Compensation setting (if not the default of 0).

| # | Description   |
|---|---|
| 3 | ISO Speed setting that was used (100, 200, or 400), or blank if it is a video clip.   |
| 4 | Zoom position of lens when the picture was captured (blank for video clip).   |
| 5 | Non-default focus setting (MACRO, INFINITY, or MANUAL) or blank if the it is a video clip or NORMAL setting.  |
| 6 | Flash setting that was used (AUTO, FLASH OFF, FLASH ON, FLASH ON WITH RED-EYE REDUCTION, NIGHT, or NIGHT WITH RED-EYE REDUCTION), or blank if it is a video clip. |
| 7 | File name of the image on the memory card.  |
| 8 | File size of the image on the memory card.  |

#### Setup

If you press OK when the Setup option is highlighted in the Playback menu, the Setup menu displays. See Chapter 6: Using the Setup Menu on page 83.

## Chapter 4: Using HP Instant Share

This camera has an exciting feature called HP Instant Share. This feature allows you to easily select images in your camera to be automatically sent to a variety of destinations the next time you connect the camera to your computer. For example, you can select images in your camera to be automatically sent to e-mail addresses (including group distribution lists), online albums, or other online services the next time you connect the camera to your computer.

NOTE Available online services vary by region.

Once you have taken still pictures with your camera, using HP Instant Share is as easy as 1-2-3!

- 1 Set up the Share menu on your camera, as explained in the next section starting on page 70.
- 2 Use the Share menu to select images in your camera for particular HP Instant Share destinations. First see Using the Share Menu on page 73, and then see Selecting Images for HP Instant Share Destinations on page 74.
- 3 Connect the camera to your computer and unload the images as explained in Unloading Images to a Computer on page 77. Once the images are unloaded to your computer, they will be automatically sent to their respective HP Instant Share destinations.

NOTE Visit www.hp.com/go/instantshare to see HP Instant Share in action.

### Setting Up the Share Menu on the Camera

Before you can use HP Instant Share, you must first set up the Share menu on your camera. The following procedure explains how to do this.

- **NOTE** You will need an Internet connection to complete this procedure on a Windows computer. Also, make sure that the memory card in your camera is not locked and has some free space on it.
- 1 Make sure that the HP Photo & Imaging Software is installed on your computer (see page 20).
- 3 The Share menu appears on the Image Display.

  - If you have previously added destinations to the Share menu, use the 
     — button to scroll to the bottom of the list of current destinations in the Share menu, highlight Customize this menu... 
     — □ N, and then press the OK button.

Once you have selected

Customize this menu... , a
message like this one appears on
the Image Display asking you to
connect the camera to your
computer.

# To add e-mail addresses and other items to this menu, connect the camera to your computer now. This will launch the HP Instant Share setup software.

- NOTE If your computer is running Windows XP, when you connect the camera to your computer in the next step, a dialog box may display that requests you to Select the program to launch for this action. Simply click on Cancel to close this dialog box.
- 4 Connect the camera to your computer by using the USB cable or an optional HP 8881 camera dock (if you use the dock, press the Save/Print 点面 button on the dock after putting the camera in the dock). This activates the Camera Share Menu Setup Wizard on your computer.
- 5 In the first window of the Wizard that appears on your computer, click on either Retrieve from Camera on a Windows computer, or Next on a Macintosh computer.
- 6 In the screen called Modify Share Menu:
  - On Windows, check to see that HP Instant Share
     E-mail is visible above the Add... button, then click on
     the Add... button. If this is the first time you are adding
     destinations to the Share menu, you will be asked to sign
     in to the HP Passport program. HP Passport allows you to
     create a secure account for the images you share using
     HP Instant Share services. The first time you see this
     screen, you will need to register as a new user. Follow the
     instructions on the screen to register.
  - On Macintosh, click on the Add... button, add the e-mail addresses or websites that you want, and then skip to step 7.

- 7 Once you are successfully registered, sign in to HP Passport, and then the HP Instant Share E-mail Setup screen will appear. Here you can either enter individual e-mail addresses or create group distribution lists, and specify how you want them to appear in the camera's Share menu. You can also enter a subject and a text message to go with all e-mails that will be sent to each e-mail address or distribution list. After completing the form, click Next. In the confirmation screen that appears, click Finish.
- 8 The names you specified for your newly added e-mail destinations or group distribution lists should now appear in the Modify Share Menu screen (in the Current Share Menu section). To add additional e-mail addresses or distribution lists to the camera Share menu, repeat steps 4-6 on Windows, or steps 4-5 on Macintosh. If you are using a Windows computer, you will not need to sign in to the HP Passport program again.
- **NOTE** You can configure a maximum of 34 **HP Instant Share** destinations (such as individual e-mail addresses or group distribution lists) that can be listed in the **Share** menu on your camera.
- 9 Select any other HP Instant Share destinations that you would like to add to your camera's Share menu from the Modify Share Menu screen. Complete the forms for those other destinations. After completing each form, click Next. In the confirmation screen that appears, click Finish.
- 10When you have finished adding HP Instant Share destinations, click on either Save to Camera on a Windows computer or Next on a Macintosh computer. The new destinations are then saved to the camera's Share menu. When the computer confirms they have been saved to your camera, disconnect the camera from the computer.

#### **Using the Share Menu**

Once you have set up the **Share** menu on the camera (see page 70), you can now use the **Share** menu. When you press the **Share** button on the camera, the most recently taken or viewed image appears on the Image Display. The **Share** menu also displays on the right side of the screen. The following table describes each of the **Share** menu options as shown in the following example **Share** screen.



| # | lcon     | Description   |
|---|----------|---|
| 1 | <b>✓</b> | Check mark indicates these destinations have been selected for the currently displayed image. (You can select more than one destination per image.)               |
| 2 | ≽⊠       | E-mail destinations that were set up in this example <b>Share</b> menu.   |
| 3 | <b>⊕</b> | A website destination that was set up. Other types of destinations may have different icons.  |
| 4 |          | Customize this menu lets you add more e-mail and other HP Instant Share destinations to the Share menu. (See Setting Up the Share Menu on the Camera on page 70.) |

#### Selecting Images for HP Instant Share Destinations

NOTE You can select each still image for any number of HP Instant Share destinations. However, you cannot select video clips for any HP Instant Share destinations.

- 1 Turn on the camera, and then press the Share 

  → button.
- 2 Use the **\( \)** buttons to scroll to a still image for which you want to select an **HP Instant Share** destination.
- 3 Use the \_\_\_\_ buttons to scroll to the destination that you want to select in the Share menu for this image, such as an e-mail destination.
- 4 Press the OK button to select the destination, and a ✓ appears over that destination in the Share menu. To unselect the destination, press the OK button again.
- 5 Repeat steps 3 and 4 to select any other HP Instant Share destinations for this image.
- 6 Scroll to other images by using the ◀ ▶ buttons, and repeat steps 3 through 5 to select HP Instant Share destinations for each of the other images. You can also use the ◀ ▶ buttons to scroll to other images to review their destinations.
- 7 When you are finished selecting all of the HP Instant Share destinations for your images, press the Share 

  → button again to exit the Share menu.
- 8 Connect the camera to your computer and unload the images as explained in Unloading Images to a Computer on page 77. Once the images are unloaded to your computer, they will be automatically sent to their respective HP Instant Share destinations.

#### How HP Instant Share E-mails Images

The way images are e-mailed via HP Instant Share works differently on Windows and Macintosh computers.

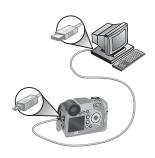
| Windows      | Images are not e-mailed as attachments. Rather, a message is sent to each e-mail address that you selected in the <b>Share</b> menu. The message contains thumbnail images of the pictures you selected for that address, as well as a link to a web page where the recipient can view the images. From that web page, the recipient can do things like reply to you, print the images, save images to their computer, forward images, and more. This makes it easy for people who use different e-mail programs to be able to see your images without the difficulty of dealing with e-mail |
|--------------|--|
| Macintosh    | attachments.  Images are e-mailed directly to recipients using the   |
| 771441110511 | default e-mail program on your computer. You must have an active Internet e-mail account that is accessible when e-mailing any images that you selected for HP Instant Share e-mail destinations.  |

# Chapter 5: Unloading, Printing, and Displaying Images

# Unloading Images to a Computer

NOTE You can also use the optional HP 8881 camera dock to do this task. See Appendix B: Camera Dock on page 129.

- 1 Confirm the following:
  - The HP Photo & Imaging software is installed on your computer (see Installing the Software on page 20).
  - If you are using a Macintosh computer, the camera's USB Configuration is set to Disk Drive in the Setup menu (see USB Configuration on page 88.)
- 2 Turn off the camera.
- 3 Your camera came with a special USB cable for connecting the camera to a computer. Connect the larger end of that USB cable to the computer.
- 4 Open the rubber door on the side of the camera and connect the small end of the USB cable to the USB connector on the camera



- NOTE If your computer is running Windows XP, when you turn on the camera in the next step, a dialog box will display that requests you to Select the program to launch for this action. Simply click on Cancel to close this dialog box.
- 5 Turn on the camera. The HP Image Unload software will launch on your computer. If you have set the software to automatically unload the images in the camera, the images will automatically unload to the computer. Otherwise, in the Welcome screen, click Start Unload. The images are unloaded to the computer, and then if there are any still images that were previously selected for printing (page 60) or selected for HP Instant Share destinations (page 69), those actions are started.
- **6** When the unload screen on the computer says **Finished**, you can disconnect the camera from the computer.
- NOTE To unload images to a Windows Me, 2000, or XP computer that does not have the HP Photo & Imaging software installed on it, change the USB Configuration setting to Disk Drive in the Setup menu. (see USB Configuration on page 88). This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the hard drive of your computer. However, the HP Instant Share feature will only work when the HP software is installed on your computer.
- NOTE Another way to unload images is to use a memory card reader or one of the memory card slots available in HP Photosmart printers. See the manual for your printer for instructions on how to do this.

## Printing Images Directly from the Camera

NOTE You can also use the optional HP 8881 camera dock to do this task. See Appendix B: Camera Dock on page 129.

You can connect the camera directly to any HP Photosmart printer or to any other HP printer with a front panel USB port, then either print all images in the camera, or just those images you have selected using the camera Print putton (see Selecting Images for Printing on page 60).

- 1 Check that the printer is turned on and is connected to the computer. There should be no blinking lights on the printer or error messages displayed about the printer. Load paper into the printer, if needed.
- 2 Your camera came with a special USB cable for connecting the camera directly to a printer. Connect the square end of the USB cable to the printer.
- 3 Open the rubber door on the side of the camera and connect the small end of the USB cable to the USB connector on the camera.



4 When the camera is connected to the printer, a Print Setup menu displays on the camera. If you already selected images to print using the camera Print button, the number of images selected is shown. Otherwise, Images: ALL is



displayed. To select or change the selections of images to print, press the Print button, scroll through the images using the buttons, then use the buttons to adjust the number of copies for each image, and when satisfied with your selections, press the Print button again to return to the Print Setup menu.

5 If all the settings in the Print Setup menu look correct, press OK on the camera to begin printing. Or, you can change settings in the Print Setup menu using the arrow keys on the camera, then follow instructions on the screen to begin printing.

**NOTE** There is a print preview in the lower right-hand corner of the **Print Setup** screen showing the page layout that will be used for printing images. This print preview updates as you change the settings for the **Print Size** and **Paper Size**.

#### Displaying Images on a TV

Images in your camera can easily be displayed as a slideshow on almost any television.

- NOTE You can also use the optional HP 8881 camera dock to do this task. See Appendix B: Camera Dock on page 129.
- 1 To connect the camera directly to a TV, you need an A/V (Audio/Video) cable. The A/V cable is included in the HP 8881 camera dock kit, or may be purchased separately (see Purchasing Camera Accessories on page 126).
- 2 Your camera will send either an NTSC or PAL video signal to a TV. The NTSC format is used primarily in North America and Japan, while the PAL format is used primarily in Europe. This setting is made for you when you set the language of the camera. To check the current setting or change the video signal format, go to the TV Configuration setting in the Setup menu. See TV Configuration on page 89.
- 3 Your camera will be the source for the TV signal (just like a VCR or a camcorder), so you must set the TV to take video input from an external video source (your camera) instead of the antenna or cable TV. Refer to the TV user's manual for directions on how to do this.

4 Turn on the camera, then connect the A/V cable to the A/V inputs on the TV and to the TV connector on your camera. Typically, the yellow connector on the cable should hook up to the Video input on your TV, and the red connector should hook up to the Audio input.



The camera starts a slideshow of each image, playing any attached audio clip or video clip, and then switching to the next image. You can also manually scroll through the images by pressing the  $\P$  buttons.

While viewing the images on the TV, you can also use the **Print Description** button to select specific images that you want to print out later.

**NOTE** The Image Display on the camera turns off when the camera is connected to a TV. However, you can still use the **Playback** and **Share** menus while connected to the TV, since the menus will display on the TV screen.

# Chapter 6: Using the Setup Menu

The **Setup** menu allows you to adjust a number of camera settings, such as the camera sounds, date and time, and the configuration of the USB or TV connection.

1 To display the Setup menu, open either the Capture menu (page 40) or the Playback menu (page 61) and then select the Setup 

menu option.





- 2 Use the buttons to scroll through the Setup menu options.
- 3 Either press the OK button to select a highlighted option and display its sub-menu, or use the ◀ ▶ buttons to change the setting for the highlighted option without going to its sub-menu.
- 4 Within a sub-menu, use the buttons and then the OK button to change the setting for the Setup menu option.
- 5 To exit the Setup menu and return to the Capture menu or Playback menu, highlight the EXIT SETUP MENU option and press the OK button.

#### Camera Sounds

Camera sounds are the sounds that the camera makes when you turn it on, press a button, or take a picture. Camera sounds are not the audio sounds recorded with images or video clips.

- 1 In the Setup menu (page 83), select Camera Sounds.
- 2 In the Camera Sounds sub-menu, highlight the volume level you would prefer.
- 3 Press OK to save the setting and return to the Setup menu.

The default Camera Sounds setting is Low.



**NOTE** The volume level of camera sounds is not affected by the audio level adjustment provided with the **Play** menu option in the **Playback** menu.

#### **Eye Start**

By default, the microdisplay will turn on whenever you put your eye up to the viewfinder. If you turn the Eye Start sensor Off, the microdisplay will be on whenever the Image Display is off (use the Live View button to toggle between the two).

- 1 In the Setup menu (page 83), select Eye Start.
- 2 In the Eye Start sub-menu, highlight On (the default) or Off.
- 3 Press OK to save the setting and return to the Setup menu.



NOTE In the interest of conserving battery power, HP recommends leaving Eye Start on.

#### **Focus Assist Light**

Sometimes in low-light situations, the camera will use the red focus assist light on the front of the camera to aid in focusing. This setting allows you to turn off this light (for example when you do not want the focus assist light to distract the subject of your picture).

- 1 In the Setup menu (page 83), select Focus Assist.
- 2 In the Focus Assist sub-menu, highlight Auto or Off.
- 3 Press OK to save the setting and return to the Setup menu.



NOTE HP recommends leaving this setting at Auto, since turning it off hinders the ability of the camera to focus correctly in low light.

#### **LCD** Brightness

This setting lets you adjust the brightness of the Image Display. By default, the Image Display is optimized for indoor use. You can use this setting to increase the brightness and contrast for better outdoor viewing.

**NOTE** If you use the Outdoor setting, the image may appear overexposed when viewing it on the camera indoors.

- 1 In the Setup menu (page 83), select LCD Brightness.
- 2 In the LCD Brightness sub-menu, select Indoor or Outdoor.
- 3 Press OK to save the setting and return to the Setup menu.



#### **Instant Review**

After a picture or video clip is captured, the image appears for several seconds in the active display. This setting allows you to select how long an image will be displayed after a picture is taken or video clip recorded.

- 1 In the Setup menu (page 83), select Instant Review.
- 2 In the Instant Review sub-menu, highlight one of the four choices available.
- 3 Press OK to save the setting and return to the Setup menu.



#### **Auto Power Off**

This setting allows you to decide when (or if) the camera will automatically power itself off after a period of inactivity to conserve power.

- 1 In the Setup menu (page 83), select Auto Power Off.
- 2 In the Auto Power Off sub-menu, highlight one of the four choices available.
- 3 Press OK to save the setting and return to the Setup menu.



Regardless of what setting you choose, the camera will have a "sleep timeout" after 60 seconds (both the microdisplay and Image Display turn off). When the camera is in the "sleep" state, pressing any button will wake the camera up again. The times selected in this sub-menu include the sleep timeout.

#### **Date & Time**

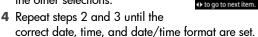
This setting allows you to set the current date and time, as well as the date/time format, for the camera. This is usually done when you first set up the camera; however, you may need to re-set the date and time when you are travelling to different time zones, or if the date and time is incorrect.

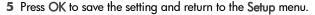
to change value.

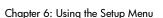
Date: 01 / 01 / 2003

Time: 12:00 am

- 1 In the Setup menu (page 83), select Date & Time.
- 2 In the Date & Time sub-menu, adjust the value of the highlighted selection by using the buttons.
- 3 Press the **1** buttons to move to the other selections.







#### **USB** Configuration

This setting determines how the camera is recognized when connected to a computer.

- 1 In the Setup menu (page 83), select USB Configuration.
- 2 In the USB Configuration sub-menu, highlight one of choices available:
  - Digital Camera—Causes the computer to recognize the camera as a digital camera using the Picture Transfer Protocol (PTP) standard. This is the default setting on the camera.
  - Disk Drive—Causes the computer to recognize the camera as a disk drive using the Mass Storage Device Class (MSDC) standard.

Use this table as a guide for which USB Configuration setting to use with your computer:

| HP Photo & Imaging software:   | Windows        | Macintosh                       |
|--------------------------------|----------------|---------------------------------|
| Installed on your computer     | Digital Camera | Disk Drive                      |
| Not installed on your computer | Disk Drive     | Digital Camera<br>(OSX systems) |

3 Press OK to save the setting and return to the Setup menu.

**USB** Configuration

Camera appears as an imaging device

when connected to a computer. (uses

Digital Camera

#### **TV Configuration**

This setting allows you to set the format of the video signal for displaying camera images on a television (TV) that is connected to the camera with an optional Audio/Video cable or HP 8881 camera dock.

The default setting depends on the language that you selected when you powered on the camera for the first time.

- 1 In the Setup menu (page 83), select TV Configuration.
- 2 In the TV Configuration sub-menu, highlight one of these two choices:
  - NTSC—Format used primarily in North America and Japan
  - PAL—Format used primarily in Europe



3 Press OK to save the setting and return to the Setup menu.

For more information on connecting the camera to a TV, see either Displaying Images on a TV on page 81 when using the optional Audio/Video cable, or Displaying Images on a TV Using the Dock on page 134 when using the HP 8881 camera dock.

#### Language

This setting allows you to set the language used in the camera interface, such as the text in menus.

- 1 In the Setup menu (page 83), select Language.
- 2 In the Language sub-menu, highlight the language you want to use.
- 3 Press OK to save the setting and return to the Setup menu.



#### **Remembered Settings**

This setting allows you to save some camera settings that would normally reset to their default values when the camera is turned off.

- In the Setup menu (page 83), select Remembered Settings.
- 2 In the Remembered Settings sub-menu, use the buttons to highlight a setting, then use the buttons to check or uncheck a selection



- 3 Press OK to save the settings and return to the Setup menu.
- NOTE The saved setting for Flash is temporarily ignored if the camera is in Video mode or the flash is down.
- **NOTE** Any Capture menu item that is not in this screen already remains set to whatever you selected when the camera is turned off and then back on.

#### **Reset Settings**

This option allows you to reset the camera to the factory default settings.

- 1 In the Setup menu (page 83), select Reset Settings.
- 2 In the Reset Settings sub-menu, highlight one of the following:
  - Cancel exits the menu without making any changes.



- All Capture Settings resets Flash, Focus, Timer/Burst, and Capture menu settings to factory defaults. If the flash is down or the camera is in Video mode, the Flash setting will be AUTO FLASH the next time the flash is available.
   Settings that were checked in the Remembered Settings sub-menu will stay checked.
- Reset All Settings resets all capture settings as described above, plus all settings in the Setup menu except Date & Time, Language, TV Configuration, and USB Configuration. All settings that were checked in the Remembered Settings sub-menu will be unchecked.
- 3 Press OK to save the setting and return to the Setup menu.

### Chapter 7: Troubleshooting and Support

This chapter contains information on the following topics:

- Resetting the camera.
- Possible problems, causes, and solutions.
- Error messages on the camera.
- Error messages on the computer.
- Self-diagnostic tests on the camera.
- How to get assistance from HP.

#### Resetting the Camera

If your camera does not respond when you press any buttons, you can try resetting the camera in the following way:

- 1 Open the battery door on the bottom of the camera and remove all four batteries.
- 2 Leave the batteries out of the camera for at least 10 minutes.
- 3 Reinsert the batteries and close the battery door.
- **4** Turn the camera back on. You will probably be prompted to set the date and time again.

#### **Problems and Solutions**

| Problem                      | Possible cause   | Solution   |
|------------------------------|--|--|
| The camera does not turn on. | The batteries are functioning incorrectly, are dead, are installed incorrectly, or are missing.  If you are using the HP AC power adapter, it is not connected to the camera, or is not plugged into a power outlet. | <ul> <li>The charge in the batteries could be low or completely drained. Try installing new or recharged batteries.</li> <li>Ensure that the batteries are inserted correctly (page 16).</li> <li>Do not use ordinary alkaline batteries. For best results, use photo-lithium batteries or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade "ultra" or "premium" varieties.</li> <li>Ensure that the HP AC power adapter is connected to the camera and is plugged into a working electrical outlet.</li> </ul> |
|                              | The HP AC power adapter is not functioning correctly.  | Ensure that the HP AC power<br>adapter is not damaged or<br>defective and is plugged into a<br>working electrical outlet.  |
|                              | The camera has stopped operating.  | Reset the camera by removing the batteries and then re-inserting them (page 93).   |

| Problem   | Possible cause  | Solution  |
|---|---|---|
| The microdisplay in the viewfinder does not turn on when I put my eye up to it.   | The Eye Start<br>sensor cannot<br>detect that you<br>are looking<br>through the<br>viewfinder<br>(sometimes<br>occurs when<br>wearing<br>glasses) | Turn the Eye Start sensor to Off in the Setup menu (page 84). Then, either the Image Display or the microdisplay will always be on (toggle back and forth between them by pressing the Live View button). |
|   | The Eye Start<br>sensor has<br>been turned<br>off.  | <ul> <li>Press the Live View button to manually turn on the microdisplay.</li> <li>Turn the Eye Start sensor to On in the Setup menu (page 84)</li> </ul>   |
| The Power/<br>Memory light<br>blinks as if<br>the batteries<br>are being<br>recharged,<br>but there are<br>no batteries<br>installed. | The camera<br>does not<br>recognize that<br>there are no<br>batteries<br>installed.   | Do nothing. The blinking is harmless and should stop after 5-30 minutes.  |
| The battery<br>gauge goes<br>up and down<br>frequently.   | Different<br>operating<br>modes of the<br>camera require<br>different power<br>levels.  | See Battery Gauge on page 122 for a full explanation.   |

| Problem                                    | Possible cause  | Solution  |
|--|---|---|
| I replace the camera batteries frequently. | Extended Image Display use for Live View or video recording, excessive flash use, and excessive zooming consume a lot of battery power. | <ul> <li>Use the microdisplay instead of the Image Display whenever possible, especially if using alkaline batteries.</li> <li>Use the zoom only when necessary.</li> <li>Use AUTO FLASH instead of FLASH ON.</li> <li>Use an HP AC power adapter to power the camera when you are using the Image Display for an extended period of time.</li> </ul> |
|  | Camera does<br>not work well<br>with regular<br>alkaline<br>batteries.  | Do not use ordinary alkaline<br>batteries. For best results, use<br>photo-lithium batteries or<br>rechargeable NiMH batteries. If<br>you must use alkaline batteries,<br>use high-grade "ultra" or<br>"premium" varieties (page 121).   |
|  | The NiMH<br>batteries you<br>are using were<br>recharged<br>incorrectly.  | When NiMH batteries are brand<br>new or have not been used in<br>several months, they will not<br>reach optimum capacity until they<br>have been charged and then<br>discharged (used) completely 4-5<br>times (page 124).  |
|  | NiMH batteries<br>have drained<br>on their own<br>because they<br>have not been<br>used lately  | NiMH batteries discharge on their<br>own when not in use and when<br>not installed in the camera. So if<br>you have not used them in a week<br>or more, they may benefit from<br>being charged (page 124)   |

| Problem                               | Possible cause   | Solution  |
|---------------------------------------|--|---|
| The camera batteries will not charge. | Rechargeable<br>batteries are<br>not inserted.             | Install NiMH batteries. Lithium and alkaline batteries cannot be recharged (page 121).  |
|                                       | Batteries are<br>already<br>charged.                       | Battery charging will not start if<br>the batteries were recently<br>charged. Try charging them<br>again after they have drained<br>awhile.   |
|                                       | Battery voltage<br>is too low for<br>charging to<br>start. | The camera will not attempt to charge batteries that may be damaged or over-discharged. Remove the batteries from the camera and charge them in an external battery charger, then try them in the camera again. If this does not work, it is likely that one or more of the batteries are bad. Purchase new NiMH batteries and try again. |
|                                       | The wrong AC power adapter is being used.                  | Use only the HP AC power adapter approved for use with this camera (page 127).  |
|                                       | The batteries<br>are damaged<br>or bad.                    | NiMH batteries degrade over<br>time and can fail. If the camera<br>detects a problem with the<br>batteries, it will not start charging<br>or will stop charging prematurely.<br>Purchase new batteries.   |
|                                       | Batteries are not inserted correctly.                      | Ensure that the batteries are inserted correctly (page 16).   |

| Problem   | Possible cause  | Solution  |
|---|---|---|
| The camera<br>does not<br>respond                           | The camera is turned off or has shut down.                              | Turn on the camera.   |
| when I press<br>a button.                                   | The camera is connected to a computer.                                  | Most of the camera buttons do not respond when the camera is connected to a computer. If they respond, it is only to turn the Image Display on if it is off, or, in some cases, turn the Image Display off if it is on.         |
|   | The batteries are drained.  | Replace or recharge the batteries.  |
|   | The camera has stopped operating.                                       | Reset the camera by removing the batteries and then re-inserting them (page 93).  |
| A long delay<br>occurs<br>between<br>pressing the           | The camera<br>needs time to<br>lock focus and<br>exposure.              | Use Focus Lock (page 25.)   |
| Shutter button<br>and the<br>camera<br>taking a<br>picture. | The scene is<br>dark and the<br>camera is<br>taking a long<br>exposure. | <ul> <li>Use the flash.</li> <li>If using flash is not possible, then use a tripod to keep the camera steady during the long exposure time.</li> <li>Make sure that the Focus Assist light is set to Auto (page 85).</li> </ul> |
|   | The camera is<br>using a flash<br>setting with<br>Red-eye<br>Reduction. | It will take longer to take a picture with Red-eye Reduction. The shutter is delayed because of the additional flash. In turn, make sure your subjects wait for the second flash.   |

| Problem  | Possible cause   | Solution   |
|--|--|--|
| The camera<br>does not take<br>a picture<br>when I press | You did not<br>press the<br><b>Shutter</b> button<br>hard enough.                | Press the <b>Shutter</b> button all the way down.  |
| the Shutter<br>button.                                   | The memory card is not installed.  | Install the memory card.   |
|  | The memory card is full.   | Unload images from the camera to your computer, then delete all images on the memory card. Or replace the card with a new one.   |
|  | The memory card is locked.   | Switch the locking tab on the memory card to the unlocked position.  |
|  | The flash is recharging.   | Wait until the flash has recharged before taking another picture.  |
|  | The camera is set to MACRO focus and cannot take a picture until it finds focus. | <ul> <li>Re-focus the camera (try using Focus Lock, page 26).</li> <li>Make sure the subject of the picture is within the Macro (close-up) range (page 36).</li> </ul> |
|  | The camera is still saving the last picture you took.                            | Wait a few seconds for the camera to finish processing the last image before taking another picture.   |

| Problem             | Possible cause  | Solution   |
|---------------------|---|--|
| My image is blurry. | The light is low and the flash is set to FLASH OFF .  | In dim light, the camera requires a longer exposure. Use a tripod to hold the camera steady, improve lighting conditions, or set the pop up the flash and set the flash to FLASH ON \$\(\psi\) (page 32).                            |
|                     | The camera was set to the wrong focus setting for the scene.                                  | Set the camera to MACRO ♥, NORMAL, or INFINITY ∞ focus and try taking the picture again (page 36.).  |
|                     | You moved the<br>camera while<br>you took the<br>picture.                                     | Hold the camera steady as you press the Shutter button or use a tripod. Watch for the tion in the active display (this means that is almost impossible to hold steady, and you must use a tripod).                                   |
|                     | The camera<br>focused on the<br>wrong thing, or<br>was unable to<br>focus.                    | <ul> <li>Make sure the focus brackets turn green before taking the picture (page 25).</li> <li>Use Focus Lock (page 25).</li> <li>Use focus search priority (page 37).</li> </ul>  |
|                     | The diopter control is out of adjustment, making the image appear blurry in the microdisplay. | Adjust the diopter control so that information overlays in the microdisplay are more in focus (page 19). This only affects the focus of the microdisplay, not the Image Display. It does not affect the focus of the captured image. |

| Problem                 | Possible cause   | Solution  |
|-------------------------|--|---|
| My image is too bright. | The flash<br>provided too<br>much light.   | <ul> <li>Turn the flash off (page 32).</li> <li>Move back from the subject and use the zoom to get the same framing.</li> <li>Use Digital Flash (page 48).</li> </ul>   |
|                         | A natural or<br>artificial source<br>other than the<br>flash provided<br>too much light. | <ul> <li>Try taking the picture from a different angle.</li> <li>Avoid pointing the camera directly toward a bright light or reflective surface on a sunny day.</li> <li>Decrease the EV Compensation (page 42).</li> </ul> |
|                         | The scene had<br>many dark<br>objects, such as<br>a black dog on<br>a black couch.       | Decrease the EV Compensation (page 42).   |
|                         | The Image Display is set for outdoor display, making images appear too bright.           | Change the LCD Brightness in the Setup menu to Indoor setting for more accurate brightness on the Image Display.  |

| Problem               | Possible cause  | Solution   |
|-----------------------|---|--|
| My image is too dark. | There was not enough light.   | <ul> <li>Wait for natural lighting conditions to improve.</li> <li>Add indirect lighting.</li> <li>Use the pop-up flash (page 32).</li> <li>Adjust the EV Compensation (page 42).</li> <li>Use Digital Flash (page 48).</li> </ul>   |
|                       | The flash was<br>on, but the<br>subject was too<br>far away.                        | <ul> <li>Make sure your subject is within the flash working distance (see Appendix C: Specifications on page 135). If so, try using the FLASH OFF (£) setting (page 32), which will require a longer exposure (use a tripod).</li> <li>Use Digital Flash (page 48).</li> </ul> |
|                       | A light is<br>behind the<br>subject.  | <ul> <li>Use the FLASH ON \$ setting (page 32) to brighten the subject.</li> <li>Increase the EV Compensation (page 42).</li> <li>Use Digital Flash (page 48).</li> </ul>  |
|                       | The scene had<br>many light-<br>colored objects,<br>such as a white<br>dog in snow. | Increase the EV Compensation (see page 42).  |

| Problem  | Possible cause  | Solution  |  |
|--|---|---|--|
| The TV does<br>not display<br>images when<br>I connect my<br>camera to it.       | Audio and<br>video cables<br>are switched   | Try switching the audio and video cables on the back of the TV (the red and yellow connectors on the cable from the camera or dock to the TV).  |  |
|  | The camera is set to the wrong TV format.   | Change the TV Configuration setting to the opposite of what it is currently set (page 89).  |  |
|  | TV is not set to correct input mode.  | Check the TV user's manual to set<br>the TV to accept video or input<br>mode.   |  |
| The wrong date and/or time is shown.   | The date and/<br>or time was set<br>incorrectly or<br>the time zone<br>has changed.   | Reset the date and time by using the Date & Time option in the Setup menu (page 87).  |  |
| The camera<br>responds very<br>sluggishly<br>when trying<br>to review<br>images. | A slow memory<br>card or too<br>many images<br>on a card can<br>affect actions<br>like scrolling<br>through<br>images,<br>magnifying,<br>deleting, etc. | <ul> <li>Run the camera self-diagnostic test (page 113) to test the speed of your memory card.</li> <li>See the section about Storage cards on page 137 for tips about memory cards.</li> </ul> |  |

#### **Error Messages on the Camera**

| Message  | Possible cause   | Solution  |
|--|--|---|
| Batteries<br>depleted. Camera<br>is shutting down. | Battery power is<br>too low to<br>continue<br>operation.   | Replace or recharge<br>batteries, or use an<br>optional HP AC power<br>adapter.                               |
| Batteries are<br>defective                         | One or more cells are shorted or severely overdischarged.  | Purchase new batteries.   |
| Batteries cannot<br>be charged                     | Either an error occurred during charging, an AC power disruption occurred during charging, the wrong AC power adapter is being used, batteries are defective, or no batteries are installed in the camera. | Retry charging the<br>batteries a couple of times.<br>If that fails, purchase new<br>batteries and try again. |
| UNSUPPORTED CARD                                   | The card in the<br>memory slot is<br>not a memory<br>card or is not a<br>supported<br>memory card.   | Ensure that the memory card is the proper type for your camera. (See Appendix C: Specifications on page 135.) |
| NO CARD IN<br>CAMERA                               | The camera does<br>not have a<br>memory card<br>installed.   | Install a memory card.  |

| Message   | Possible cause  | Solution  |
|---|---|---|
| CARD IS<br>UNFORMATTED<br>Press OK to<br>format card      | The memory card needs to be formatted.  | Format the memory card (remove the card from the camera if you do not want it to be formatted).   |
| CARD HAS<br>WRONG<br>FORMAT<br>Press OK to<br>format card | The memory<br>card is formatted<br>for a different<br>device such as<br>an MP3 player.                  | Re-format the memory card (remove the card from the camera if you do not want it to be reformatted).  |
| Unable to Format  | The memory card is corrupted.   | Replace the memory card.  |
| CARD IS LOCKED  | The memory card is locked.  | Switch the locking tab on the memory card to the unlocked position.   |
| CARD FULL   | There is<br>insufficient room<br>to save more<br>images on the<br>memory card.                          | Unload images from the camera to your computer, then delete all images on the memory card (page 65). Or replace the card with a new one.  |
| CARD IS<br>UNREADABLE                                     | The camera is having trouble reading the card. The memory card may be corrupted or an unsupported type. | <ul> <li>Try turning the camera off and then back on.</li> <li>Ensure that the memory card is the proper type for your camera (see page 137). If it is the proper type, try formatting it (see page 65). If it will not format, it is probably corrupted. Replace the memory card.</li> </ul> |

| Message            | Possible cause   | Solution   |
|--------------------|--|--|
| PROCESSING         | The camera is<br>processing data,<br>such as saving<br>the last picture<br>you took.               | Wait a few seconds for the camera to finish processing before taking another picture or pressing another button.   |
| CHARGING<br>FLASH  | The camera is recharging the flash.  | It takes longer to charge<br>the flash when the<br>batteries are low and in<br>dark scenes. If you see this<br>message a lot, you may<br>need to replace or<br>recharge the batteries. |
| FOCUS TOO FAR      | The focus  | Set the camera to  |
| and blinking 🕏     | distance is<br>beyond where<br>the camera can<br>focus in MACRO<br>mode.                           | NORMAL focus.  Move closer to the subject (within the range of MACRO focus - see page 36).   |
| FOCUS TOO<br>CLOSE | The focus<br>distance is closer<br>than the camera<br>can focus in<br>MACRO mode.                  | Move further away from the subject (within the range of MACRO & focus - see page 36).  |
| Blinking <b>*</b>  | The focus<br>distance is closer<br>than the camera<br>can focus without<br>being in<br>MACRO mode. | Set the camera to MACRO & focus or move farther away.  |

| Message                           | Possible cause   | Solution   |
|-----------------------------------|--|--|
| UNABLE TO FOCUS                   | The camera<br>cannot find focus<br>in MACRO<br>mode, possibly<br>due low contrast.                           | <ul> <li>Use Focus Lock         (page 25). Point at a part of the scene that is brighter.</li> <li>Make sure the camera is within the range of MACRO  focus (page 36).</li> </ul>  |
| LOW LIGHT -<br>UNABLE TO<br>FOCUS | The scene is too<br>dark and the<br>camera cannot<br>focus.  | <ul> <li>Add an external light source.</li> <li>Use Focus Lock (page 25). Point at a part of the scene that is brighter.</li> <li>Make sure the Focus Assist light is set to Auto (page 85).</li> </ul>                    |
| (camera shake warning)            | The light is low<br>and the image is<br>likely to be<br>blurry due to the<br>long exposure<br>required.      | Use the flash (page 32), or use a tripod.  |
| ERROR SAVING<br>IMAGE             | Memory card<br>was half-locked<br>or was removed<br>before the<br>camera finished<br>writing to the<br>card. | <ul> <li>Check to see if the tab on the edge of the memory card is fully in the unlocked position.</li> <li>Always wait until the Power/Memory light returns to green before removing the card from the camera.</li> </ul> |

| Message  | Possible cause  | Solution  |
|--|---|---|
| F-number and<br>shutter speed turn<br>red in Live View | The camera is<br>out of range for<br>the selected<br>aperture or<br>shutter speed.                                    | <ul> <li>Select a different aperture when using the Aperture Priority Avexposure mode.</li> <li>Select a different shutter speed when using Shutter Priority Tvexposure mode.</li> </ul>                                    |
| Cannot display image                                   | Possibly a picture taken with another camera or a corrupt image file caused by the camera not shutting down properly. | <ul> <li>The image may still be OK - download the image to your computer and try opening it with the HP software.</li> <li>Do not remove the memory card when the camera is turned on.</li> </ul>                           |
| Camera has<br>experienced an<br>error                  | The camera may have a firmware problem.   | Turn the camera off and<br>then on again. If that does<br>not fix the problem, try<br>resetting the camera (see<br>page 93). If the problem<br>persists, note the error<br>code and then call HP<br>Support (see page 114). |
| Unknown USB<br>device                                  | The camera is<br>connected to a<br>USB device that<br>it does not<br>recognize.                                       | Make sure that the camera is connected to a supported printer or computer.  |

| Message                                    | Possible cause  | Solution  |
|--|---|---|
| Unable to communicate with printer         | There is no connection between the camera and printer.              | Check that the printer is turned on.  Make sure the cable is connected between the printer and the camera or the optional HP 8881 camera dock. If that does not work, turn off the camera and disconnect it. Turn the printer off and then on again. Reconnect the camera and turn it on. |
| Unsupported printer                        | The printer is an unsupported device.                               | Connect the camera to a supported printer, such as an HP Photosmart printer or another HP printer with a front panel USB port. Or connect the camera to a computer and print from there instead.  |
| Photo tray is engaged                      | The selected paper size cannot be used with the printer photo tray. | Disengage the printer photo tray, or change the paper size.   |
| Printer top cover is open                  | The printer is open.  | Close the top cover of the printer.   |
| Incorrect or<br>missing print<br>cartridge | The printer cartridge is the incorrect model or is missing.         | Install a new printer cartridge, turn the printer off, then turn it back on.  |

| Message   | Possible cause   | Solution  |
|---|--|---|
| Printer has a<br>paper jam<br>or<br>The print carriage<br>has stalled | There is a paper<br>jam or the<br>printer carriage<br>has stalled.                           | Turn off the printer. Clear<br>the paper jam, and then<br>turn on the printer.  |
| Printer is out of paper   | The printer is out of paper.   | Load paper into the printer, and then press the OK or Continue button on the printer.   |
| Selected print size<br>is larger than<br>selected paper<br>size.      | Print size is too<br>large for the<br>paper size.  | Press OK on the camera to<br>return to the Print Setup<br>screen and select print size<br>that matches paper size.                    |
| Selected paper size is too big for printer.                           | Selected paper<br>size is larger<br>than the<br>maximum size<br>supported in the<br>printer. | Press OK on the camera to<br>return to the Print Setup<br>screen and select a paper<br>size that fits the printer.                    |
| Borderless<br>printing is only<br>supported on<br>photo paper.        | You tried to print<br>a borderless<br>picture on plain<br>paper.                             | Put photo paper in the printer, or press OK on the camera to return to the <b>Print Setup</b> screen and select a smaller print size. |
| Borderless<br>printing is not<br>supported on this<br>printer.        | The printer does<br>not support<br>borderless<br>printing.                                   | Press OK on the camera to<br>return to the <b>Print Setup</b><br>screen and select a smaller<br>print size.                           |
| Printing cancelled  | The print job has been canceled.   | Press the OK button on the camera. Complete the print request again.  |

#### **Error Messages on the Computer**

| Message  | Possible cause  | Solution  |
|--|---|---|
| Connection<br>between the<br>imaging device<br>and computer<br>failed                | The camera<br>might be<br>connected to a<br>computer<br>through a USB<br>hub.   | Try connecting the camera directly to the computer, or disconnect other devices attached to the USB hub.  |
| The software<br>cannot retrieve<br>the Share Menu<br>information from<br>your camera | The computer needs to write files to the memory card during HP Instant Share setup, but the memory card is either missing, full, or locked. | Either install a memory card, make room on the memory card, or unlock it by switching the locking tab on the card to the unlocked position.   |
| Computer cannot find the connected camera  | The camera is turned off.   | Turn on the camera.   |
|  | The camera is not working correctly.  | Try connecting the camera directly to an HP Photosmart printer or an HP printer with a front panel USB port, and print an image. This will verify that the image, memory card, USB connection, and the USB cable are functioning correctly. |
|  | The cable is not connected correctly.   | Make sure that the cable is firmly connected to the computer and camera.  |

| Message Possible cause Solution                       |  | Solution  |
|---|--|---|
| Computer cannot find the connected camera (continued) | The camera is set to the Digital Camera setting in the USB Configuration sub-menu of the Setup menu, but the computer cannot recognize the camera as a digital camera. | Change the USB Configuration setting to Disk Drive in the Setup menu. (page 88.) This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the hard drive of your computer. |
|   | The camera is connected to the computer through a USB hub, and your USB hub is not compatible with the camera.   | Connect the camera directly to a USB port on the computer.  |
|   | You are using<br>the HP 8881<br>camera dock<br>and forgot to<br>press the Save/<br>Print button.   | Press the Save/Print button on the camera dock.   |
|   | The memory card is locked.   | Switch the locking tab on<br>the memory card to the<br>unlocked position.   |
|   | The USB connection failed.   | Reboot the computer.  |

#### **Camera Self-diagnostic Tests**

If you think your camera may be defective or malfunctioning in some way, there is a diagnostic program (a set of eleven different tests) that you can run on the camera to try to determine the problem. The following things are tested on the camera; Flash, LEDs (lights), Buttons, Live View, LCD Color, Microdisplay, Audio Playback, Record Audio, Memory Card, and SDRAM.

#### **NOTE** The test is in English only.

- 1 Turn off the camera.
- 2 Hold in the Flash button on the back of the camera.
- 3 Turn on the camera while continuing to press on the Flash button. You should see a blue screen titled CAMERA SELF-DIAGNOSTICS appear on the Image Display.



- 4 Follow the simple instructions on the Image Display to perform the set of tests. Some tests will tell you if the camera passed or failed, while other tests will make the camera do something, and you must check to see if the camera did it correctly. If any of the tests fail, note which one(s), so that you can provide this information when you contact HP Support. The entire set of tests takes only a few minutes to complete.
- 5 To exit the diagnostic program at any point, simply turn off the camera.

#### **Getting Assistance**

This section contains support information for your digital camera, including support website information, an explanation of the support process, and support phone numbers.

#### **HP Accessibility Website**

Customers with disabilities can get help by visiting www.hp.com/hpinfo/community/accessibility/prodserv.

#### **HP Photosmart Website**

Visit www.photosmart.hp.com or www.hp.com/photosmart for the following information:

- Tips on using your camera more effectively and creatively
- HP digital camera driver updates and software
- Register your product
- Subscribe to newsletters, driver and software updates, and support alerts

#### Support Process

The HP support process works most effectively if you perform the following steps in the order specified:

- Review the troubleshooting section of this User's Manual, which starts on page 94.
- 2 Access the HP Consumer Care Center website for support. If you have access to the Internet, you can obtain a wide range of information about your digital camera. Visit the HP website for product help, drivers, and software updates at www.hp.com/support.

Consumer Care is available in the following languages: Dutch, English, French, German, Italian, Portuguese, Spanish, Swedish, Traditional Chinese, Simplified Chinese, Japanese, Korean. (Danish, Finnish, and Norwegian support information is available in English only.)

- 3 Access HP e-support. If you have access to the Internet, connect with HP via e-mail by going to: www.hp.com/support. You will receive a personal reply from an HP Consumer Care technician. E-mail support is available in the languages listed at that website.
- 4 Contact your local HP dealer. If your digital camera has a hardware failure, take it to your local HP dealer for a solution. Service is free during your digital camera's limited warranty period.
- 5 Contact the HP Consumer Care Center for support by phone. Please consult the following website to check the details and conditions of phone support in your country/ region: www.hp.com/support. As a part of HP's continuing efforts to improve phone support information services, we advise you to check the HP website on a regular basis for new information regarding service features and delivery. If you cannot solve the problem using the above options, call HP while you are in front of your computer and digital camera. For faster service, please be prepared to provide the following information:
  - The digital camera's model number (located on the front of the camera)
  - The digital camera's serial number (located on the bottom of the camera)
  - The computer's operating system
  - The version of the digital camera software (located on the camera's CD label)
  - Messages displayed at the time the situation occurred

The applicable conditions for HP phone support are subject to change without notice.

Telephone support is free from the date of purchase for the period specified unless otherwise noted.

| Locations     | Free Phone<br>Support Period |
|---------------|------------------------------|
| Africa        | 30 days                      |
| Asia Pacific  | 1 year                       |
| Canada        | 1 year                       |
| Europe        | 1 year                       |
| Latin America | 1 year                       |
| Middle East   | 30 days                      |
| United States | 1 year                       |

#### **Phone Support in the United States**

Support is available both during and after the warranty period.

Within the period of your warranty, telephone support is provided free of charge. Call (800) 474-6836.

US phone support is available in both English and Spanish 24 hours a day, 7 days a week (days and hours of support may change without notice).

After the warranty period, call (800) 474-6836. Charges are \$25.00 per issue, and are charged to your credit card. If you think your HP product needs service, call the HP Consumer Care Center, which can help determine if service is required.

### Phone Support in Europe, the Middle East, and Africa

HP Consumer Support phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region: www.hp.com/support.

Algeria +213 (0) 61 56 45 43

Austria +43 (0) 820 87 4417

Bahrain +973 800 728

**Belgium** 070 300 005 (Dutch) 070 300 004 (French)

Czech Republic +42 (0) 2 6130 7310

Denmark +45 70202845

Egypt +20 02 532 5222

Finland +358 (0) 203 66 767

France +33 (0) 892 6960 22 (Euro 0.34/minute)

Germany +49 (0) 180 5652 180 (Euro 0.12/minute)

Greece +30 10 60 73 603

Hungary +36 (0) 1 382 1111

Ireland 1890 923902

Israel +972 (0) 9 830 4848

Italy 848 800 871

Luxembourg 900 40 006 (French) 900 40 007 (German)

Morocco +212 224 04747

Chapter 7: Troubleshooting and Support

Netherlands 0900 2020 165 (Euro 0.10/minute)

Norway +47 815 62 070

Poland +48 22 865 98 00

Portugal 808 201 492

Romania +40 1 315 44 42

Russian Federation +7 095 797 3520 (Moscow) +7 812 346 7997 (St Petersburg)

Saudi Arabia +966 800 897 14440

Slovakia +421 2 6820 8080

South Africa 086 000 1030 (inside RSA) +27-11 258 9301 (outside RSA)

Spain 902 010 059

Sweden +46 (0) 77 120 4765

Switzerland 0848 672 672 (German, French, Italian— Peak time 0.08 CHF/Outside peak 0.04 CHF)

Tunisia +216 1 891 222

Turkey +90 216 579 71 71

Ukraine +7 (380 44) 490-3520

United Arab Emirates 800 4910

United Kingdom +44 (0) 870 010 4320

#### **Other Phone Support Worldwide**

HP Consumer Support phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region: www.hp.com/support.

Argentina +54 0 810 555 5520

Australia +61 (3) 8877 8000 (or local (03) 8877 8000)

**Brazil** +55 (11) 3747 7799 (Grande São Paulo) +55 0800 157751 (outside Grande São Paulo)

Canada +1 905 206 4663 (during the warranty period) +1 877 621 4722 (after the warranty period)

Central America and the Caribbean +1 800 711 2884

Chile +56 800 22 5547 (Post-sales Business Computing +56 800 360 999 (Post-sales Home Computing)

China +86 (21) 3881 4518

Colombia +57 9 800 114 726

Guatemala +502 1 800 999 5105

Hong Kong SAR +852 2802 4098

India 1 600 112267 or +91 11 682 6035 (Hindi & English)

Indonesia +62 (21) 350 3408

Japan 0570 000 511 (inside Japan) +81 3 3335 9800 (outside Japan)

Korea, Republic of +82 (2) 3270 0700 (Seoul) 0 80-999-0700 (outside Seoul)

Malaysia +60 1 800 805 405

Mexico +52 58 9922 (Mexico City) +52 01 800 472 6684 (outside Mexico City)

New Zealand +64 (9) 356 6640

Peru +51 0 800 10111

Philippines +63 (2) 867 3551

Puerto Rico +1 877 2320 589

Singapore +65 6272 5300

Taiwan +886 0 800 010055

Thailand +66 (2) 661 4000

United States +1 (800) 474-6836

Venezuela +58 0 800 4746 8368

Vietnam +84 (0) 8 823 4530

# Appendix A: Batteries and Camera Accessories

#### **Managing Batteries**

Your camera uses four AA batteries. For best results, use photo-lithium or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade "ultra" or "premium" varieties instead of ordinary alkaline batteries.

The following table shows how different types of batteries perform in different type of use scenarios:

| Type of use                                       | Alkaline | Photo-<br>Lithium | NiMH |
|---|----------|-------------------|------|
| Most economical (more than 30 pictures per month) | Poor     | Fair              | Good |
| Most economical (less than 30 pictures per month) | Fair     | Good              | Fair |
| Heavy use of flash, frequent pictures             | Poor     | Good              | Good |
| Heavy use of video                                | Poor     | Good              | Good |
| Heavy use of Live View                            | Poor     | Good              | Good |
| Longest overall battery life                      | Poor     | Good              | Fair |
| Low temperature/Winter use                        | Poor     | Good              | Fair |
| Infrequent use (without dock)                     | Fair     | Good              | Fair |
| Infrequent use (with dock)                        | Fair     | Good              | Good |
| Want to recharge batteries                        | No       | No                | Yes  |

**NOTE** If you do not intend to use your camera for extended periods of time (more than a month), we strongly recommend that you remove the batteries.

When replacing batteries, always replace them together as a set. Never mix different battery types or batteries of different charge levels. Battery leakage and damage to the camera may result.

#### **Battery Gauge**

The following battery levels may be displayed on the status screen, in Live View, in Playback, and when the camera is connected to a computer or printer.

| lcon                        | Description   |
|-----------------------------|---|
|                             | Batteries have 65-100 percent battery life remaining.   |
|                             | Batteries have 35-65 percent battery life remaining.  |
|                             | Batteries have 10-35 percent battery life remaining.  |
| <u> </u>                    | Batteries have less than 10 percent battery life remaining. Camera will power down soon. Live View is disabled. |
| Blinking                    | Batteries are depleted. Camera will proceed to power down.  |
| <b>⇒</b> >                  | Camera is operating on AC power (with full or non-rechargeable batteries).                                      |
| Animated battery filling up | Camera is operating on AC power and is charging the batteries.  |

**NOTE** The battery gauge is most accurate after a few minutes of use. When the camera is turned off, the batteries recover and the initial gauge reading may not be as accurate as that obtained during actual use.

You might notice that occasionally the battery level icons will fluctuate with the same set of batteries. This occurs because some operating modes like Live View and video recording consume much more power than other modes, and will cause the battery level icons to indicate your batteries are low, because battery operating time in those modes is short. When you switch to a mode that requires less power, like Playback, the battery level icon may go back up, indicating there is more time left in the batteries if you stay in that mode.

NOTE When you remove the batteries from the camera, the date and time settings are preserved for approximately 10 minutes. If the camera is without batteries for longer than 10 minutes, the clock is set to the last date and time at which the camera was used. You may be prompted to update the date and time.

#### **Extending Battery Life**

- Minimize the use of Live View on the Image Display and video, especially when using alkaline batteries.
- Use the viewfinder microdisplay to frame pictures instead of the Image Display. Leave the Image Display off whenever possible.
- Make sure the Eye Start sensor is set to On (page 84).
- Use zoom only when necessary.
- Use the AUTO FLASH setting rather than FLASH ON (page 32).

- Do not set Auto Power Off in the Setup menu to Never (page 86).
- Minimize power cycling. If you expect to average more than one picture every five minutes, leave the camera on rather than turning it off after each shot. This minimizes the number of times the lens has to extend and retract.
- Use an optional HP AC power adapter or HP 8881 camera dock when the camera will be on for extended periods of time, or when unloading pictures to your computer or printing.

#### **Rechargeable Batteries**

Nickel Metal Hydride (NiMH) batteries can be recharged by using a battery charger. NiMH batteries can also be recharged in the camera when the camera is connected to an optional HP AC power adapter or HP 8881 camera dock.

When the batteries are recharging, the Power/Memory light on the back of the camera blinks green. Batteries are fully recharged via the HP AC power adapter or camera dock in 15 hours

Some things to keep in mind when using NiMH batteries are:

- The first time that you use a set of NiMH batteries, be sure that you fully charge them before using them in the camera.
- You may notice that the first several times you use NiMH
  batteries, the battery life seems shorter than what you
  expect. Performance will improve and become optimal after
  the batteries have been charged and then discharged (used)
  completely four or five times. You can use the camera
  normally to discharge the batteries during this
  "conditioning" period.

- Always recharge all four NiMH batteries at the same time.
   One low-charged battery will reduce the battery life for the other batteries in the camera.
- NiMH batteries discharge when not in use, whether they are
  installed in a camera or not. If they have not been used for
  more than two weeks, recharge them before using them
  again. Even if you are not using your batteries, it is a good
  idea to charge them every six months to a year to prolong
  their useful life.

### Sleep Time-out for Power Conservation

To conserve battery power, the active display turns off automatically if there is no button activity for 60 seconds. When the camera is in this "sleep" state, pressing any button will wake the camera up again. If no buttons are pressed during the sleep state, the camera will turn off after the time that is set in the **Auto Power Off** menu (page 86), unless it is connected to a computer, printer, or TV.

#### **Purchasing Camera Accessories**

You can purchase these accessories for your camera from your local retailer or online at www.hpshopping.com:

- HP Photosmart 8881 camera dock (C8881A, option #A2L in the United States and Canada, option #002 for rest of the world) includes:
  - Camera dock
  - Four rechargeable NiMH batteries
  - Audio/video cable
  - USB cable for connecting to computer or printer
  - 6.6V AC power adapter
- HP Photosmart Digital Camera Deluxe Starter Kit
   (C8889A #A2L for United States and Canada, C8884B
   #UUS for continental Europe, C8884B #ABU for the United
   Kingdom, C8889A #ABG for Australia, and C8889A #AB1
   for Korea) includes:
  - Quick battery charger (with 6.6V AC power adapter and car adapter) - charges batteries in 2-4 hours
  - Four rechargeable NiMH batteries
  - 32 MB SD memory card
  - Expandable padded camera case
- HP Photosmart Digital Camera Starter Kit
   (Y1789B, option #A2L for United States and Canada, #UUS for continental Europe, #ABU for the United Kingdom, #ABG for Australia, and #AB1 for Korea) includes:
  - Quick battery charger (with 6.6V AC power adapter) charges batteries in 2-4 hours
  - Four rechargeable NiMH batteries
  - Expandable padded camera case

- HP Photosmart 6.6V AC power adapter (C8875A, option #001 for the United States and Canada, #002 for Europe, Australia, New Zealand, and Korea)
   HP supports only HP AC power adapters and other accessories expressly approved by HP.
- HP Photosmart SD Memory cards (for more information about supported memory cards, see Storage on page 137)
  - 32 MB SD card (C8895A)
  - 64 MB SD card (C8896A)
  - 128 MB SD card (C8897A)

At the time of this printing, HP was in the process of releasing 256 MB and 512 MB cards to the market. They should be available in the same retail places where you find the cards listed above.

- SD to CF card adapter(C8885A -only available in the U.S. on www.hpshopping.com)
- HP Photosmart padded camera case (C8906A)
- HP audio/video accessory cable to connect to a television (TV).

NOTE You can also use any Yadapter audio cable with dual

RCA plugs on one end and a 1/8 inch (3.175 mm) mini-stereo jack on the other end. You will also need an adapter plug that accepts the 1/8 inch (3.175 mm) jack and fits into the 3/32 inch (2.38 mm) jack on your camera.

# Appendix B: Camera Dock

#### **Getting Started with the Dock**

The optional HP Photosmart 8881 camera dock allows you to easily unload images to your computer, print images directly to a printer, and display images and video clips on a television (TV). In addition, if you have rechargeable batteries in the camera (provided in the box with the camera dock), they will be recharged anytime the camera is in the camera dock.

- 1 Follow the instructions on the Setup poster that was packaged with the camera dock. These steps include:
  - Attaching the dock insert that was in your camera box to the top
    of the camera dock.
  - Installing rechargeable NiMH batteries in your camera.
  - Connecting the AC power source to the dock.
  - Connecting the dock to a computer, printer, and/or television.

NOTE The first time that you use the rechargeable batteries, be sure that you fully charge them in the camera before using the camera. It may take up to 15 hours to fully charge the batteries. The camera dock has four connectors on the back:



| lcon              | Description  |
|-------------------|--|
| DC IN 6V<br>♦ € ♦ | Connects to an HP AC power adapter.                                  |
| ă                 | Connects to the television.  |
|                   | Connects directly to USB-enabled HP DeskJet and Photosmart printers. |
|                   | Connects to your computer.   |

A sliding door over the printer and computer connectors prevents you from using both connectors at the same time (the camera dock is not a USB hub).

- **NOTE** The HP camera dock does not work without AC power. Be sure to use ONLY the HP AC adapter and the cables that came with the camera dock.
- 2 Before placing the camera into the dock remove the rubber plug from the dock connector on the bottom of the camera, as well as any cables that may be attached to the camera.
- 3 Place the camera in the dock with the back of the camera facing the front of the dock.



#### **Dock Lights and Buttons**

The camera dock has a light near the top front that provides battery charging status. When that light is:

- On the camera is in the dock, the dock has power, and the batteries are fully charged (or are not rechargeable).
- Blinking the camera is in the dock, and the dock is charging
  the camera batteries.
- Off the dock has no power or there is no camera in the dock.

Two buttons on the front of the dock activate connections to the devices indicated by their icons:

The Save/Print <a href="#">Save/Print</a> <a href="#">Save/Pri



 The TV is button activates the TV connection, which starts a slideshow of images from your camera. If the light in this button is on, the dock is connected to the TV. If the light is blinking, then an audio/video signal is being sent to the TV.

# Unloading Images to a Computer Using the Dock

- 1 Confirm the following:
  - The dock insert that came in your camera box is attached to the top of the camera dock (see the camera dock Setup poster).
  - The USB cable is connected between the camera dock and your computer, and the power cable is plugged into the dock (see the camera dock Setup poster)
  - The HP Photo & Imaging software is installed on your computer (see Installing the Software on page 20).
  - If you are using a Macintosh computer, the camera's USB Configuration is set to Disk Drive in the Setup menu (see USB Configuration on page 88.)
- 2 Place the camera into the camera dock. The camera will turn on automatically.
- 3 Press the Save/Print 🕁 button on the dock. The HP Image Unload software will launch on your computer. If you have set the software to automatically unload the images in the camera, the images will automatically unload to the computer. Otherwise, in the Welcome screen, click Start Unload. The images are unloaded to the computer, and then if there are any still images that were previously selected for printing (page 60) or selected for HP Instant Share destinations (page 69), those actions are started.
- 4 When the unload screen on the computer says Finished, your images have been saved and shared. You can take the camera out of the dock, or leave it there to recharge the camera batteries (if the batteries are rechargeable).

#### **Printing Images Using the Dock**

- 1 Confirm the following:
  - The dock insert that came in your camera box is attached to the top of the camera dock (see the camera dock Setup poster).
  - The USB cable is connected between the camera dock and your printer, and the power cable is plugged into the dock (see the camera dock Setup poster)
  - The printer is turned on and paper is loaded in the printer.
- 2 Place the camera into the camera dock. The camera will turn on automatically.
- 3 Press the Save/Print 🖈 button on the dock, and the Print Setup menu displays on the camera. If you already selected images to print using the camera Print 🗗 button, the number of images selected is shown in the Print



- Setup menu. Otherwise, Images: ALL is displayed. To select or change the selections of images to print, press the Print button, scroll through the images using the buttons, then use the buttons to adjust the number of copies for each image, and when satisfied with your selections, press the Print button again to return to the Print Setup menu.
- 4 If all the settings in the Print Setup menu look correct, press OK on the camera to begin printing. Or, you can change settings in the Print Setup menu using the arrow keys on the camera, then follow instructions on the screen to begin printing.
- **NOTE** There is a print preview in the lower right-hand corner of the **Print Setup** screen showing the page layout that will be used for printing images. This print preview updates as you change the settings for the **Print Size** and **Paper Size**.

# Displaying Images on a TV Using the Dock

- 1 Confirm the following:
  - The dock insert that came in your camera box is attached to the top of the camera dock (see the camera dock Setup poster).
  - The audio/video cable is connected between the camera dock and your TV, and the power cable is plugged into the dock (see the camera dock Setup poster).
- 2 Your camera will send either an NTSC or PAL video signal to a TV. The NTSC format is used primarily in North America and Japan, while the PAL format is used primarily in Europe. This setting is made for you when you set the language of the camera. To check the current setting or change the video signal format, go to the TV Configuration setting in the Setup menu (page 89)
- 3 Your camera will be the source for the TV signal (just like a VCR or camcorder), so you must set the TV to take video input from an external video source (your camera) instead of the antenna or TV cable. Refer to the TV user's manual for directions on how to do this.
- 4 Place the camera into the camera dock. The camera will turn on automatically.
- 5 Press the TV button on the dock. The camera starts a slideshow of each image, playing any attached audio clip or video clip, and then switching to the next image. You can also manually scroll through the images by pressing the buttons on the camera. To end the slideshow, press the TV button again.
- NOTE The Image Display on the camera turns off when the camera is connected to a TV, but you can still use the Playback and Share menus, because the menus will display on the TV screen.

# Appendix C: Specifications

| Feature                        | Description   |  |
|--------------------------------|---|--|
| Resolution                     | Still pictures:  • 5.26 MP (2668 by 1970) total pixel count  • 5.08 MP (2608 by 1952) effective pixel count  Video clips:  • 288 by 208 total pixel count |  |
| Sensor                         | Diagonal 9.04 mm (1/1.8-inch, 4:3 format) CCD   |  |
| Color depth                    | 36-bit (12 bits by 3 colors)  |  |
| Lens                           | Focal length:  Wide—7.6 mm  Telephoto—61 mm  35 mm equivalent approximately 37 mm - 300 mm  F-Number:  Wide—f/2.8 to f/11.3  Telephoto—f/3.1 to f/12.4    |  |
| Lens threads                   | 55 mm diameter for optional lenses and filters<br>(separate lens adapter required - refer to Tiffen<br>catalog that was included in your camera box)      |  |
| Viewfinder                     | Zooming 1/4 VGA color sequential microdisplay viewfinder with diopter control   |  |
| Eyestart sensor for viewfinder | Minimum activation distance: 30 mm Maximum activation distance: 55 mm Maximum deactivation distance: 70 mm  |  |

| Feature                   | Description  |  |  |
|---------------------------|--|--|--|
| Zoom                      | 8x optical, 7x digital zoom  |  |  |
| Focus                     | <ul> <li>TTL auto focus</li> <li>Wide—0.1 m (3.9 in) to infinity.</li> <li>Telephoto—0.9 m (35.4 in) to infinity.</li> <li>Focus settings: NORMAL (default), MACRO, INFINITY, MANUAL FOCUS</li> </ul>  |  |  |
| Shutter speed             | 1/2000 to 16 seconds   |  |  |
| Tripod mount              | Yes  |  |  |
| Built-in flash            | Built-in flash assembly, 3 second recharge.  |  |  |
| Flash working<br>distance | Zoom   Position   ISO 100   ISO 200   ISO 400   ISO 40 |  |  |
|                           | 7.2 ft 9.8 ft 14.4 ft  |  |  |
| External flash            | No   |  |  |
| Flash settings            | Flash Off, Auto Flash, Auto with Red-eye<br>Reduction, Flash On, Flash On with Red-eye<br>Reduction, Night, Night with Red-eye Reduction   |  |  |
| Image Display             | 2-inch color LED backlit, polysilicon TFT LCD with 130,338 pixels (557 by 234)   |  |  |

| Feature               | Description  |  |
|-----------------------|--|--|
| Storage               | <ul> <li>Slot for memory card</li> <li>One 32 MB SD memory card included.</li> <li>This camera supports both Secure Digital (SD) and some MultiMediaCard<sup>TM</sup> (MMC) memory cards. Only MMC cards that have been verified compliant to the MultiMediaCard<sup>TM</sup> specification as of January 2000 are supported. Compliant MMC memory cards have the IIIIIIIMT MultiMediaCard<sup>TM</sup> logo on the card or package.</li> <li>SD cards are recommended, as they are faster than MMC cards at reading and writing data.</li> <li>This camera may support memory cards up to 2 GB, though HP has only tested up to 512 MB, as 1 GB and 2 GB cards are not available yet. Cards larger than 2 GB will not work. A high capacity card itself does not affect camera performance, but a large number of files (over 300) does affect the time it takes for the camera to turn on.</li> <li>The number of images that can be saved in</li> </ul> |  |
|                       | memory depends on the image quality settings (see Memory Card Capacity on page 141).   |  |
| Image capture options | Still (default) Self-Timer—still picture or video clip taken after 10 second delay Self-Timer - 2 shots—still picture taken after 10 second delay, then a second picture taken about 3 seconds later Burst—camera takes pictures until the buffer is full (typically 4-6 pictures) Video—15 frames per second (includes audio), maximum length up to 1 minute  |  |

| Feature                   | Description  |  |
|---------------------------|--|--|
| Audio capture             | With still pictures:  EXIF 2.2 at a minimum sampling rate of 22.05 KHz.  Maximum of 60 seconds of audio can be captured at the time a picture is taken by holding down the Shutter button after taking a picture (not available in Burst or Self-Timer modes).  Audio clip annotation (maximum 60 seconds) can be added to image in the Playback menu.  With video clips:  Audio is captured automatically with video.  MPEG1 level-1 minimum sampling rate of 22.05 KHz |  |
|                           | Bi-linear up sampled to 44.1 KHz   |  |
| Exposure<br>Mode settings | Auto (default), Action, Landscape, Portrait,<br>Aperture Priority, Shutter Priority, Video   |  |
| Exposure<br>Compensation  | Can be set manually from -3.0 to +3.0 EV (Exposure Value) in 1/3 EV increments.  |  |
| White Balance settings    | Auto (default), Sun, Shade, Tungsten, Fluorescent,<br>Manual   |  |
| AE Metering settings      | Average, Center-Weighted (default), Spot   |  |
| ISO Speed settings        | Auto (default),100, 200, 400   |  |
| Digital Flash             | Off (default), Low, High   |  |
| Color settings            | Full Color (default), Black & White, Sepia   |  |
| Resolution settings       | <ul> <li>5 MP - 2608 x 1952 (default)</li> <li>1MP - 1296 x 976</li> </ul>   |  |

| Feature                   | Description   |
|---------------------------|---|
| Compression settings      | *** — Best  ** — Better (default)  * — Good   |
| Saturation settings       | Low, Medium (default), High   |
| Sharpness<br>settings     | Low, Medium (default), High   |
| Contrast settings         | Low, Medium (default), High   |
| Playback<br>magnification | Magnifies a still image to 150x on the Image Display  |
| Print options             | Print D button allows you to select images in the camera to be printed automatically (up to 99 copies of the image) when the camera is connected to a computer or certain HP printers.  |
| Compression format        | <ul><li>JPEG (EXIF) for still images</li><li>MPEG1 for video clips</li></ul>  |
| Interfaces                | <ul> <li>USB Mini-AB receptacle; allows USB (A to Mini-B) to a computer or USB (Mini-A to B) to certain printers (any HP Photosmart printers or any other HP printer with a front panel USB port)</li> <li>A/V (2.5mm male stereo jack) out to TV</li> <li>DC input 5.9 to 6.6Vdc @ 2000mA</li> <li>HP Photosmart 8881 camera dock</li> </ul> |
| Orientation<br>Sensor     | Yes   |

| Feature   | Description   |
|-----------|---|
| Standards | <ul> <li>PTP transfer (15740)</li> <li>MSDC transfer</li> <li>NTSC/PAL</li> <li>JPEG</li> <li>MPEG1</li> <li>DPOF 1.1</li> <li>EXIF 2.2</li> <li>DCF 1.0</li> </ul>   |
| Power     | Camera has a maximum steady state power consumption of 8 Watts (1300 mA @ 6.2 Vdc).  Power sources include:  4 AA batteries (4 non-rechargeable AA batteries included) or optional HP AC power adapter.  Acceptable batteries include photo-lithium, "ultra" or "premium" grade alkaline, or rechargeable NiMH. NiMH batteries can be recharged in the camera using the optional HP AC power adapter or HP camera dock.  Optional HP AC power adapter (see Purchasing Camera Accessories on page 126 for part numbers for different regions):  Input: 100 to 240Vac  Output: 5.9 to 6.6Vdc @ 2000mA  Optional HP Photosmart 8881 camera dock (see Purchasing Camera Accessories on page 126 for part numbers for different regions) |
|           | Recharging in camera with the optional HP AC power adapter or HP camera dock (100% in 15 hours).  Automatic advanced power management.  |

| Feature                  | Description  |
|--------------------------|--|
| External body dimensions | 115 mm (L) by 85 mm (W) by 85 mm (H) (measurements with camera off and flash down)   |
| Weight                   | 300 grams (9.6 ounces) without batteries   |
| Temperature range        | Operational: 5 to 45° C (41 to 113° F) at 15 to 85% relative humidity Storage: -30 to 65° C (-22 to 149° F) at 15 to 90% relative humidity |
| Warranty                 | HP 1 year exchange warranty  |

#### **Memory Card Capacity**

The following table lists the approximate number of still images that can be stored on a 32 MB Secure Digital (SD) memory card when the camera is set to the different Resolution and Compression settings available in the Capture menu (see page 51).

**NOTE** The actual file sizes and number of still images that can be stored on the memory card will vary, depending on the content of each still image.

|  | 5MP - 2608 x 1952<br>Resolution | 1 MP - 1296 x 976<br>Resolution |
|--|---------------------------------|---------------------------------|
| *** - Best                                     | 11 images                       | 23 images                       |
| Compression                                    | (2.6 MB each)                   | (1.25 MB each)                  |
| ** - Better                                    | 23 images                       | 48 images                       |
| Compression                                    | (1.25 MB each)                  | (600 KB each)                   |
| <ul><li>⋆ - Good</li><li>Compression</li></ul> | 48 images<br>(600 KB each)      | 96 images<br>(300 KB each)      |

| A                                  | Best Compression setting 52     |
|------------------------------------|---------------------------------|
| AA batteries 121                   | Better Compression setting 52   |
| AC power adapter                   | blinking lights on camera 11, 1 |
| connector on camera 14             | bonus software 20, 21           |
| HP part number 140                 | brackets in Live View screen 25 |
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| 2-second release priority 39       | using 35                        |
| active display, using 23           | buttons                         |
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| alkaline batteries 121             | on camera dock 131              |
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| connector 81                       | camera dock                     |
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| types to use 121                   | Help for menu options 41        |
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| audio only 65                  | effect of digital zoom on size  |
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| images and video clips from    | effect of Resolution setting on |
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| digital zoom 31                | button 10                       |
| diopter control 12, 19         | pop-up description 13           |
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